Kodak

Capture Software

User's Guide

A-63054

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1 Introduction

Kodak Capture Software

Kodak Capture Software is an easy-to-install, easy-to-use production scanning application for electronic capture of documents from *Kodak* Scanners. Capture Software is ideal for imaging, forms processing and workflow applications, and as a standalone application. It manages scanning, indexing and batching-simplex and duplex, color, bi-tonal and grayscale. Batches can be easily exported to many popular applications. Capture Software allows you to fully utilize your *Kodak* Scanner capabilities for maximum productivity. All functions are performed in software; no special hardware acceleration is required.

Kodak Capture Software is designed for speed, accuracy, and ease-of-use. It enables optimum scanner throughput and maximum productivity. A high-speed multi-page display presents images deskewed and autocropped for legibility. A complete set of icon-based tools is available to simplify scanning management.

Kodak Capture Software enables all functions of the following scanners, both simplex and duplex models:

- *Kodak* i30 and i40 Scanners
- *Kodak* i1210 and i1220 Scanners
- *Kodak* i55 and i65 Scanners
- *Kodak* i50, i60, i80 Scanners
- *Kodak* i1310 and i1320 Scanners
- *Kodak* i150 and i160 Scanners
- *Kodak* i1410, i1420 and i1440 Scanners
- *Kodak* i250, i260, i280 Scanners
- *Kodak Digital Science* Scanner 3520
- *Kodak* 3590C Scanner
- *Kodak* 4500 Scanner
- *Kodak* i610, i620, i640, i660 Scanners
- *Kodak* i810, i820, i830 and i840 Scanners
- *Kodak* i1840 Scanner
- *Kodak* i1860 Scanner

In addition to the current *Kodak* Scanners listed above, Capture Software also supports:

- *Kodak Digital Science* Scanner 1500
- *Kodak Digital Science* Scanner 2500
- *Kodak Digital Science* Scanner 3500
- *Kodak Digital Science* Scanner 3510
- *Kodak Digital Science* Scanner 5500
- *Kodak Digital Science* Scanner 7500
- *Kodak Digital Science* Scanner 7520
- *Kodak Digital Science* Scanner 9500
- *Kodak Digital Science* Scanner 9520
- *Kodak Digital Science* Scanner/Microimager 990
- *Kodak Imagelink* 500 Scanner
- *Kodak Imagelink* 900 Scanner
- *Kodak Imagelink* 923 Scanner

Features

Some features of Capture Software:

- All functions are performed using this software, no special hardware acceleration is required.
- Fast display in scale to gray of bi-tonal (i.e., black and white) images.
- Auto-rotate of color, bi-tonal, and grayscale images.
- Auto-delete with or without preview.
- Multi-image display (1, 2, 4, and 8 images can be displayed simultaneously).
- Easy-to-use Scanner bar and Button bar, and a Tool bar that provides tools to rescan, insert, delete and move pages. It also provides direct access to threshold and contrast values.
- Programmable Batch Output Formats make Capture Software compatible with a range of imaging systems on the market.
- Pre-defined set of image parameter templates.
- Patch code reading for document separation.
- Bar code reading for automatic indexing.
- Zonal OCR for automatic indexing.
- MICR code reading for automatic indexing.
- Key data entry and Drag 'n Drop OCR for manual indexing

Kodak Capture Software Lite

Kodak Capture Software Lite (only for i100, i200, i1200, i1300 and i1400 Series Scanners and i30/i40/i50/i55/i60/i65/i80 Scanners) is a production scanning application, with limited functionality, that is sufficient for use as a department application with your *Kodak* Scanner.

Capture Software Lite allows scanning, viewing, and storing in standard Batch Output Formats (e.g., Single-page TIFF, Multi-page TIFF, PDF). In addition, all features of the scanner are supported.

Upgrade to the full version of Capture Software and receive these additional features and functionality:

- Software bar code and patch code reading
- Indexing from bar codes, OCR text, MICR code or key data entry

NOTE: Only one index field is available in Capture Software Lite. Up to 10 index fields are available in the full version.

- Automatic Batch and Document Separation from patch and bar codes
- Merge and Split of bi-tonal images
- User profiles
- Software length detection (e.g., flag errors on multifeeds)
- Post-Scanning Toolbar functions (Insert, Rescan, Crop, Blank, Move image, Copy image [or image area], Split document)
- Calendar Duplex Mode
- Access to all Capture Software Batch Output Formats (currently over 40 available)

NOTE: Capture Software Lite will not run in full production mode even with an attached hardware key. You must upgrade to the full version for full functionality.

Support policy

To view the support policy for *Kodak* Capture Software Lite, please visit the Kodak web site at: www.kodak.com/go/cswlite and click on **Support**.

System development

The Capture Software program was developed by Eastman Kodak Company and I.R.I.S. Group, Belgium.

Using this manual

This User's Guide describes the functions and procedures in Capture Software and Capture Software Lite.

Chapters 2 and 3 are for individuals who are responsible for scanning, manipulating images within a document, and writing to image batches. These individuals must have a working knowledge of IBM (or compatible) PCs and the Windows operating environment. In addition to computer and scanner operations skills, a basic understanding of digital imaging or image scanning is helpful.

Chapters 4 through 11 are intended for the system administrator who is responsible for configuring the scanner and Capture Software.

Appendices A through I outline the differences between the Capture Software products specific to the following:

- Appendix A, *Kodak* i30/i40 and i55/i65 Scanners
- Appendix B, *Kodak* i50, i60 and i80 Scanners
- Appendix C, *Kodak* i100 and i200 Series Scanners
- Appendix D, *Kodak* i600 Series Scanners
- Appendix E, *Kodak* i800 Series Scanners
- Appendix F, *Kodak* 3500/4500 Series Scanners
- Appendix G, *Kodak* i1200 and i1300 Series Scanners
- Appendix H, *Kodak* i1800 Series Scanners
- Appendix I, *Kodak* i1400 Series Scanners

Appendix J provides a glossary of terms.

NOTE: Many of the screen examples in this manual were captured using Capture Software with a Scanner 3500. These examples, except where noted, also apply to Capture Software support for the *Kodak* Scanners listed in this chapter.

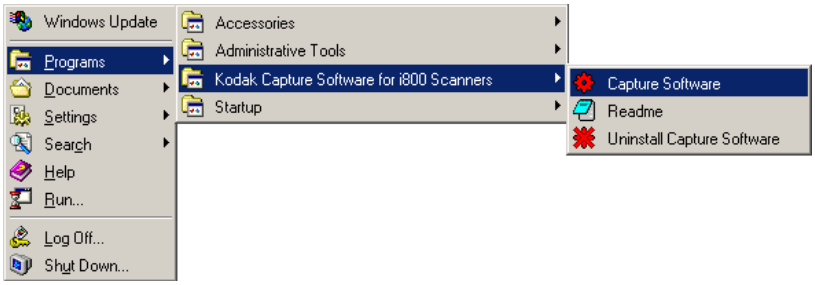
2 Getting Started with Capture Software

Before you begin

Before you begin make sure that the scanner is connected to the system and powered on.

Login procedure

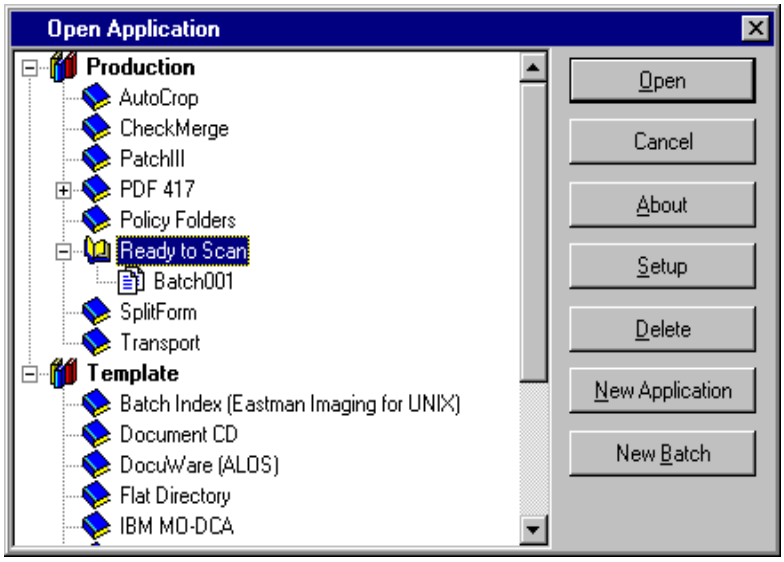
1. Click on **Start** on the Windows desktop.
2. Move the mouse arrow to **Programs>*appropriate Kodak Capture Software icon (depending on scanner model)*>Capture Software**.



If your system administrator has established user profiles for your Capture Software installation, you may be required to log in to Capture Software.

3. Enter your user name and password to complete the login procedure.

The Capture Software Open Application window appears.



Using Capture Software

Capture Software provides Production applications and Template applications. For more information on how to set up these templates, see Chapter 4, *Application Setup*.

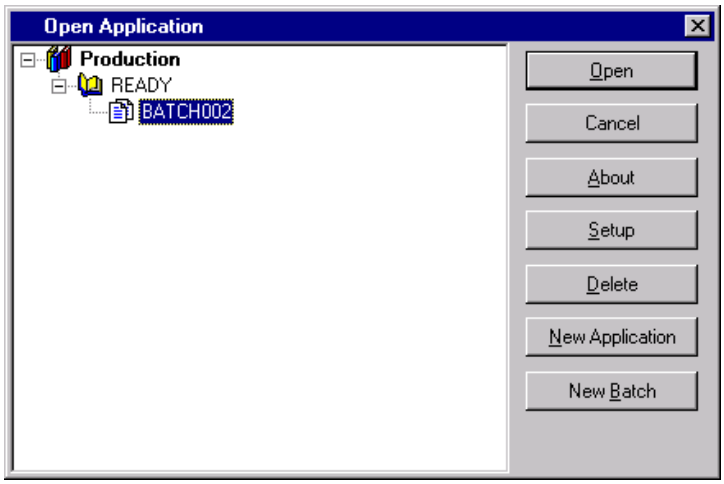
The sections that follow provide procedures for opening and closing an application as well as opening and creating a new batch. Chapter 3, *Working in Capture Software*, provides detailed information on other functions you can access from the Capture Software main window.

Opening an application

To open an application:

1. Select **File>Open Application**.

   The Open Application dialog box appears. You will see only applications for which you have privileges.



2. Double-click on the application you want to open or highlight the application and click **Open**.

   The batches associated with the application appear.

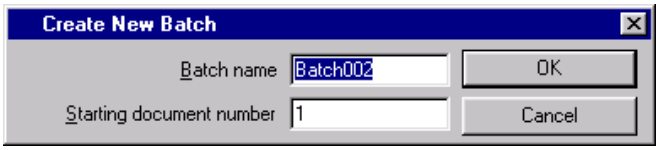
3. Click **Open** to display the batch you selected.

Creating a new batch

From the Open Application window:

1. Select an application where you want the new batch to reside.
2. Click **New Batch**.

   The Create New Batch dialog box appears.



3. Enter a new batch name in the **Batch** name field.

   By default, Capture Software suggests a new batch name based upon the last batch name created for the application (e.g., if the last batch name is Batch002, then the new batch name default will be Batch003).

4. Enter the starting document number.

   By default, Capture Software suggests a starting document number based upon the Application Setup.

5. Click **OK**. The main window appears with the batch name you assigned.

   NOTES:

   - Depending on your User Profile settings and the Application Setup, other dialog boxes may appear before the main Capture Software window appears.
   - *For scanners with document printing.* If Document Printing is enabled, the Set Counter dialog box will be displayed. See the scanner-specific Appendix which refers to your scanner model for more information regarding the Set Counter dialog box.

6. Start scanning into the new batch.

Opening a batch

- To open an existing batch, double-click on the batch you want to open or highlight it and click **Open.**

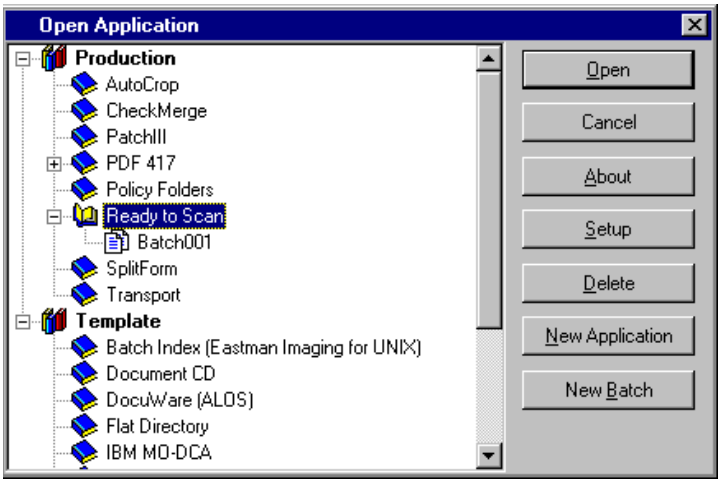
  The main window appears and shows the existing batch.

If you are scanning in a multiple scanner environment, and the batch has already been opened by another workstation, Capture Software will not allow you to open the batch. Instead, a message similar to the one shown below will appear.

Changing to another application

- From the main window, select **File>Open Application.**

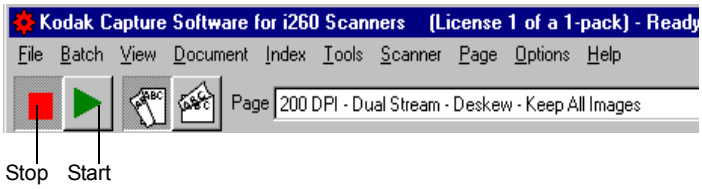
  The Open Application dialog box appears.



From this dialog box you can open another application.

Starting and stopping the scanner in Capture Software

To start the scanner in Capture Software:


Kodak Capture Software for i260 Scanners (License 1 of a 1-pack) - Ready
File Batch View Document Index Tools Scanner Page Options Help
Page 200 DPI - Dual Stream - Deskew - Keep All Images
Stop
Start

- Click on the green **Start** button (on the Scanner bar in the Capture Software main window) or press **F7**.

  It may take a few seconds to start the scanner the first time because Capture Software is downloading parameters. Successive starts are faster.

NOTES:

- Refer to the User's Guide for your scanner for procedures on feeding documents. Most scanners detect the presence of documents in the feeder and the transport/feeder starts to run when the Start button is selected.
- If your scanner has a flatbed and flatbed scanning is enabled, pressing the Start button will scan the flatbed.

For the i600 and i800 Series Scanners,

- The **Auto-start transport** option in the Scanner Setup dialog determines what the Start button does.
- When Auto-Start transport is enabled, the scanner transport and feeder will automatically run and start scanning.
- When Auto-Start transport is disabled, the Start button enables only the scanner. You must press the green button on the scanner control panel to start the scanner transport/feeder.

For the i1200 and i1300 Series Scanners,

- If no paper is in the feeder when the Start button is pressed, the scanner will wait up to 10 seconds to accept documents. When documents are detected, the transport/feeder will run.

For the i1800 Series Scanners,

- The option to automatically start the scanner is accessible through the Scanner Settings for each Page Setup. Refer to the i1800 Series Scanner-specific appendix for more details.
- When the auto-start option is enabled, the scanner transport and feeder will automatically run and start scanning when the Start button is pressed.
- When the auto-start option is disabled, the Start button enables only the scanner. You must touch the **Scan** button on the touchscreen on the scanner to start the scanner transport/feeder.

To stop the scanner in Capture Software:

- Click the red **Stop** button on the Scanner bar of the Capture Software main window or press **F6**.

NOTE: The i50/i60/i80 Scanners will stop when all documents in the feeder have been scanned.

Exiting Capture Software

- To exit Capture Software, select **File>Exit**.

Restarting if a transport time-out occurs

The scanner stops automatically when you do not scan documents for a period of time (based upon the time-out period that is set in the Scanner Setup dialog box).

To restart the feeder and transport, click the green **Start** button on the Scanner bar and continue feeding documents. You do not need to restart Capture Software.

Recovering from a paper jam

Occasionally a paper jam may occur. To clear the scanner and restart Capture Software:

1. Clear any paper from the scanner by following the guidelines described in the User's Guide for your scanner.
2. Make sure that all of the scanner's access doors are completely closed.
3. Wait until the scanner is ready (e.g., on the i30/i40 Scanner, the green light has stopped flashing).

NOTE: Check the screen to verify the last complete image you received from the scanner before the paper jam. Restart scanning from that point.

4. Click the green **Start** button on the Scanner bar in the main window.

NOTE: For the i200 Series Scanners, the red indicator light remains on until the scanner is restarted. If the jam was properly cleared, the red indicator light will go out and the green indicator light will illuminate.

Calibration

Calibration optimizes the optical system of your scanner in order to achieve the best overall quality of scanned images. Frequent calibration is not needed or recommended. However, if you do need to calibrate the scanner (for example, poor image quality), follow the steps below.

NOTE: Calibration through Capture Software is only available for the i100, i200, i600 and i800 Series Scanners and the 3000/4000 Series Scanners.

1. Clean the imaging guides properly (e.g., see the procedures described in the User's Guide for your scanner).
2. Obtain a proper calibration target.

   Use a clean, blank sheet of paper with a matte surface (not glossy). Make sure that the target is wider than the documents to be scanned. It is best to use the square calibration target available from Kodak.

   NOTE: For the i800 Series Scanners only: You must use the special black-and-white calibration target provided with the scanner.

3. Select **Scanner>Calibration** in the Capture Software main window.

   NOTE:For Color Scanners 3590C and 4500, select **Scanner>Color Calibration** for color image quality issues.

   A prompt appears.

4. Place the calibration target in the scanner ADF.
5. Click **OK**.

3 Working in Capture Software

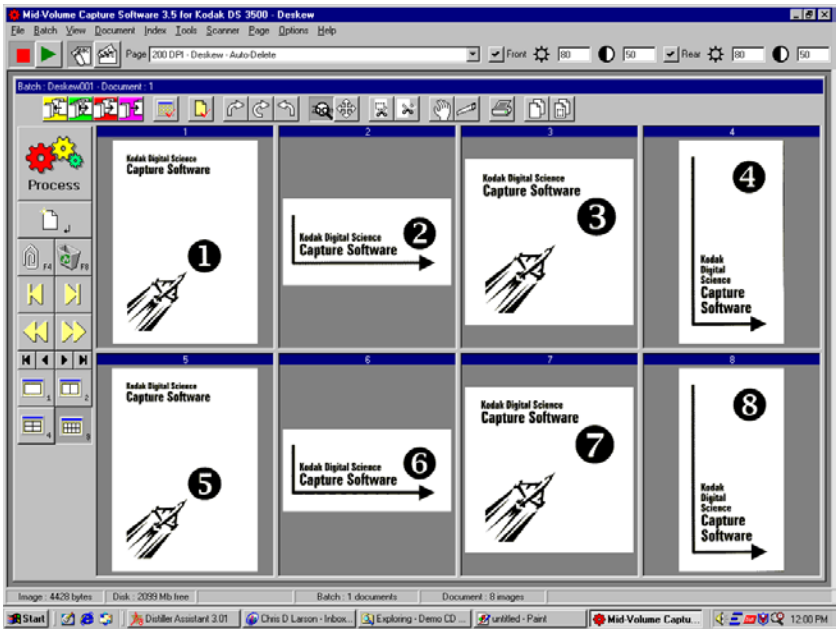
The main Capture Software window

This chapter describes how to access and use the various functions of Capture Software through the tools and menus of the main window.

NOTE: Some functions are unique to your scanner model. For very specific functions, see the appropriate scanner-specific Appendix.

The main window contains the following elements:

- Program title bar
- Menu bar
- Scanner bar
- Document title bar
- Tool bar
- Image display
- Button bar
- Status bar

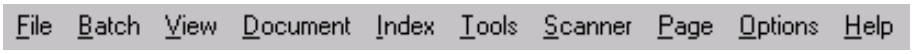


Program title bar

The Program title bar provides the name of the selected scanner and the application name.

Menu bar

The following summarizes the functions associated with each Capture Software menu.



File — allows you to open, close, or delete an existing Production or Template application. In addition, you can create and set up a new application.

Batch — allows you to open an existing batch or create a new batch; and process current or all available batches.

View — allows you to display 1, 2, 4, or 8 images, fit images to the display windows regardless of its original size and allows you to enlarge or reduce the images by a fixed percentage.

Document — provides many options of navigating through the displayed images of a document and the documents within a batch. You can also create and delete documents and attach new images to an existing document.

Index — allows you to edit batch, document fields.

NOTE: If using *Kodak* Capture Software Lite only one index field can be defined.

Tools — provides a variety of methods which allow you to manipulate displayed images.

Scanner — allows you to set up, start, stop and calibration the scanner.

Page — allows you to set up specific page properties, duplex scanning mode (classic or calendar), and image setup options.

Options — provides access to hiding or displaying the Tool bar, Status bar, Button bar, and Scanner bar.

Help — provides version number information about the current installation of Capture Software.

The following sections provide information on each of these menu options. In many cases, you can use a keyboard, Tool bar, Scanner bar, or Button bar shortcut instead of selecting an option from the menu.

Button bar, Scanner bar, and Tool bar summaries are described later in this chapter. Procedures on how to use a menu option are covered in the following menu descriptions.

File menu

The File menu allows you to open, close, import, export, or delete an existing Production or Template application. In addition, you can create and set up a new application.

New Application — accesses the Create New Application dialog box which allows you to create a new application based upon an existing application.

Open Application — allows you to open an existing application. Keyboard shortcut: **F3**

Close Application — closes the current application and open batch.

Import/Export Application — allows you to export (or save) application settings from one Capture Software installation and import (or load) those settings to another Capture Software installation. These functions currently are not supported.

Application Setup — accesses the Application Setup dialog box. More information about setting up applications can be found in Chapter 4, *Application Setup.*

Delete Application — deletes the current application. You cannot delete an application that contains batches.

Properties — automatically closes the current application and accesses the Capture Software Program Properties. More information about Program Properties can be found in Chapter 11, *System Administration — Program Properties.*

Exit — closes Capture Software. Keyboard shortcut: **Alt+F4**

Open Application dialog box

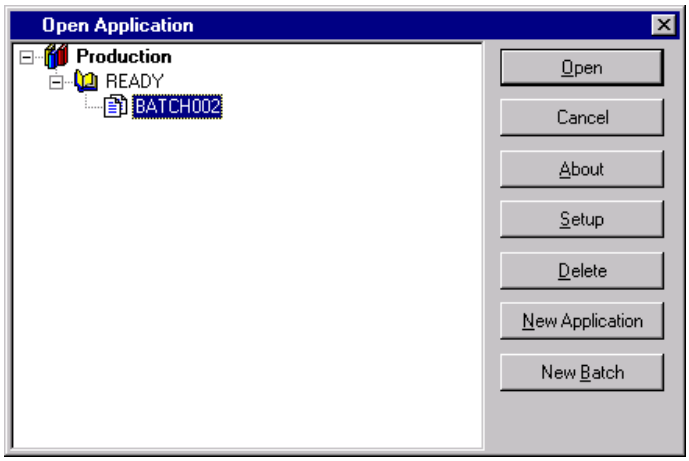
The Open Application dialog box allows you to:

- Open an existing application.
- Close the Open Application dialog box.
- Access information (i.e., a Readme text file) for selected applications.
- Set up a new application — see Chapter 4, *Application Setup*, for more information.
- Delete an existing application.
- Create a new batch — see the section entitled “The Batch menu” later in this chapter for more information.

Opening an application

1. Select **File>Open Application**.

   The Open Application dialog box appears.



2. Select the application you want to open.

   The batches associated with the application will be displayed.

3. Click **Open** to show the batch you selected in the main Capture Software window.

Closing an application

- Select **File>Close Application** from the main Capture Software window.

Deleting an application

1. Select the application you want to delete.

   The batches associated with the application will be displayed.

   NOTE: An application cannot be deleted unless all batches are processed or deleted.

2. Click **Delete**.

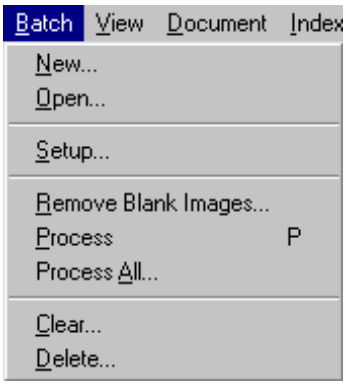
Accessing online application information

1. Select the application you want information about.
2. Click **About**.

   If available, information about the application will appear in a text window.

Batch menu

The Batch menu allows you to open, create, set up and delete batches. You can also process a current batch or all available batches.



New — allows you to create a new batch.

Open — shows a list of available batches for a selected application. Opening a batch from the list automatically closes the current batch.

Setup — allows you to change the name of a batch. When selected, the Batch Setup dialog box will appear, which allows you to enter a new Batch name. After you have entered a new batch name, click **OK**.

Remove Blank Images — allows you to remove blank rear or front sides produced by the scanner.

Process — processes the current batch according to the selected Batch Output Format. Keyboard shortcut: **P**

Process All — shows all available batches for the current application; you can select one or more batches to process unattended.

Clear — erases all images in a batch, but keeps the batch subdirectory structure intact.

Delete — erases both the images and batch subdirectory structure of the selected batch.

Creating a new batch

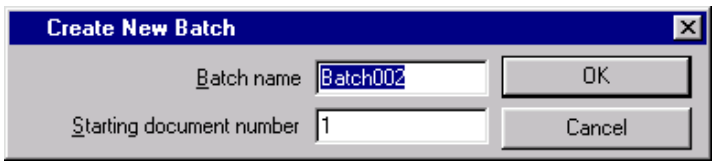
When you create a new batch, Capture Software will not disable the scanner.

From the Open Application window:

1. Select an application where you want the new batch to reside.
2. Click **New Batch**.

From the main Capture Software window:

3. Select **Batch>New**. The Create New Batch dialog box appears.



4. Enter a new batch name in the **Batch** name field.

   By default, Capture Software suggests a new batch name based upon the last batch name created for the application (e.g., If the last batch name is Batch002, then the new batch name default will be Batch003).

5. Enter the starting document number.

   By default, Capture Software suggests a starting document number based upon the Application Setup.

6. Click **OK**. The main window appears with the batch name you assigned.

   Depending on your scanner, User Profile settings and the Application Setup, other dialog boxes may appear before the main Capture Software window appears. See the appropriate Appendix in this manual for your scanner for specific information about creating a new batch.

7. Start scanning into the new batch.

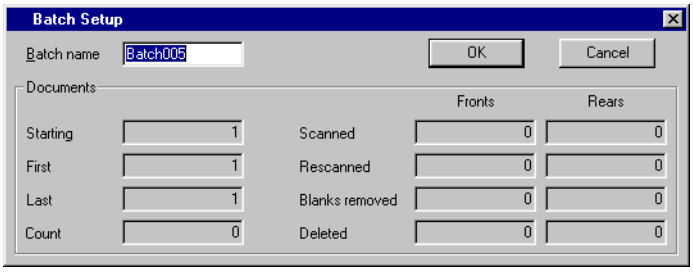
Opening a batch

To open an existing batch, select **Batch>Open**. The Open Application dialog box appears. The batch that was previously opened is highlighted. You can now open any existing batch in any Production application.

Setting up a batch

From the main window:

1. Select **Batch>Setup**. The Batch Setup dialog box appears.



2. If desired, enter a new name for the current batch.
3. Click **OK**. The new batch name is reflected in the list of batches for the selected application.

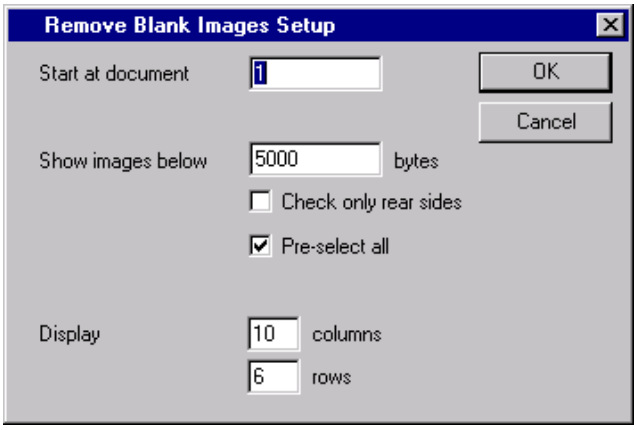
   The main Capture Software window appears. You can continue scanning.

Removing blank images

This option allows you to remove the blank rear or front sides produced by the scanner. If you use this option, you will be asked to verify the batch delete of the blank images.

From the main window:

1. Select **Batch>Remove Blank Images**. The Remove Blank Images Setup dialog box appears.

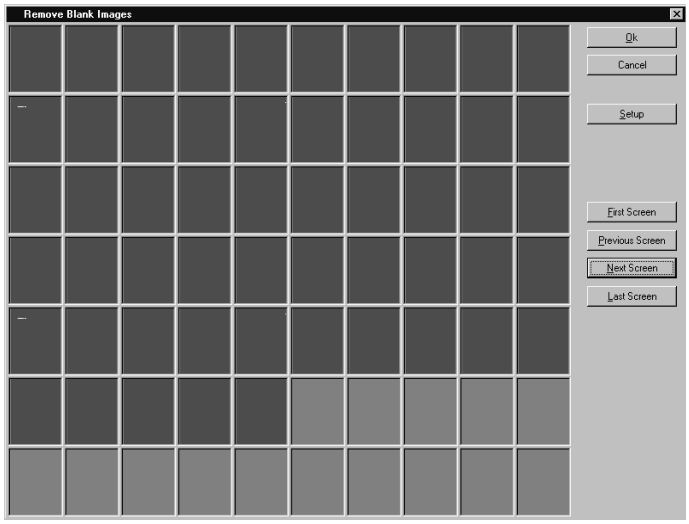


2. Enter the document in the batch where you want verification to begin. The default is 1.
3. Define the byte size threshold of the images to be verified.

   NOTE: A good setting for typical business documents is 5000 bytes in 200 dpi bi-tonal.
4. If you want to remove only the blank rear sides of the images in a batch, click the **Check only rear sides** check box.
5. If you do not want all images pre-selected for deletion, uncheck the **Pre-select all** check box to disable this option.
6. Define the number of **columns** and **rows** you want to display.

   On a 1024 x 768 SVGA screen, a matrix of 14 x 7 allows you to check 98 images per screen for images containing valid data.
7. Click **OK** to accept the values you entered.

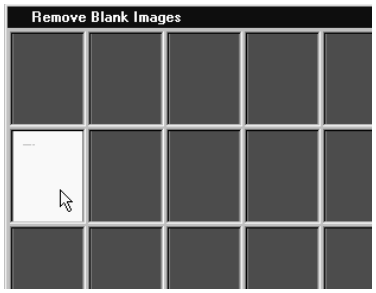
After a batch has been processed, Capture Software displays all rear images below the specified number of bytes (e.g., 5000 bytes). These images are displayed in a red highlight color (unless you disabled the **Pre-select all** option). All colored images (which appear black here, but red on your screen) are considered blank and ready to be deleted.



To delete the blank images:

1. By default, all images are selected for deletion. Select any images you do not want to delete by clicking them individually.

   The color changes to white.



NOTE: The **First Screen, Previous Screen, Next Screen**, and **Last Screen** buttons help you navigate through all the blank images in the batch.

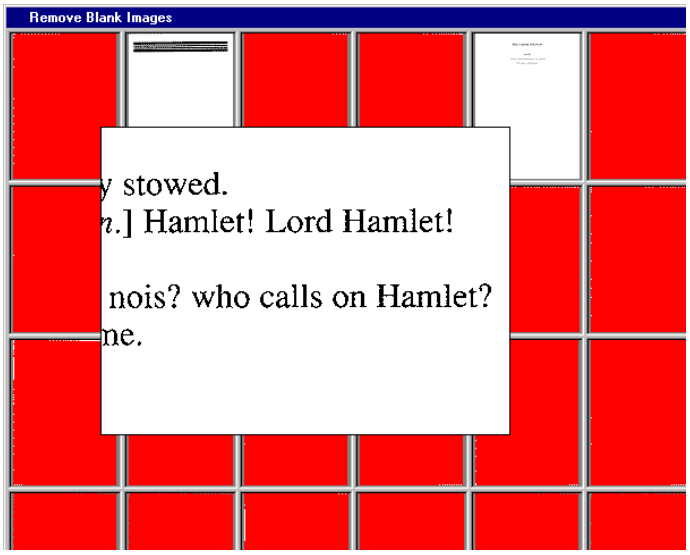
2. Click **OK**. The message *Remove all selected images?* appears.
3. Select **Yes** to confirm the deletion of images. Capture Software removes the images and repaginates the documents. The available batch and hard disk capacity are also updated.

Changing the Remove Blank Images setup

You can change the Remove Blank Images setup by selecting **Setup** on the Remove Blank Images dialog box. The Remove Blank Image Setup dialog box appears and you can change the parameters as required.

Displaying a detailed view of an image

You can display a more detailed view of an image by right-clicking on the thumbnail of the image. The image will be magnified to 100%. By moving the magnifying glass over the thumbnail, you can verify whether or not the image should be deleted.



Processing batches

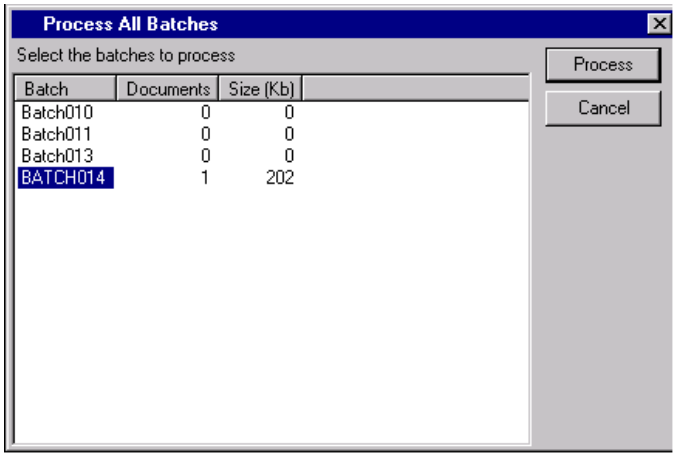
You can process one batch at a time or process all available batches. When you process a batch, the batch is processed according to the selected Batch Output Format in Application Setup (Output tab). This typically results in the batch being copied to an output subdirectory path.

Processing the current batch

- Select **Batch>Process**. A progress meter will be displayed while the batch is processing.

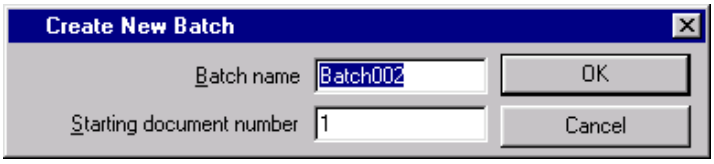
Processing all available batches

1. Select **Batch>Process All**. The Process All Batches dialog box appears. This dialog box allows you to select one or more batches to be processed.
2. Click **Process**.



   Each selected batch is processed in the order displayed.

3. After processing, the Create New Batch dialog box appears.



   By default, the name of the new batch is incremented by one. It is suggested that you increment the previous batch name by one.

4. Click **OK** to continue scanning into the new batch.

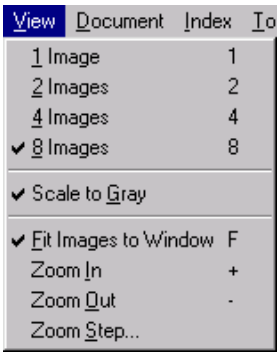
Clearing and deleting batches

The **Clear** and **Delete** options are available from the Batch menu. When you clear a batch, Capture Software deletes all images but keeps the batch subdirectory name and all subdirectories that have already been created.

When you delete a batch, Capture Software deletes the entire batch subdirectory structure and removes the batch name from the list of batches in the selected application.

View menu

The View menu provides options which allow you to change the way you view images in the Image Display area.



1 Image — allows you to display one image in the Image Display area. Keyboard shortcut: **1**

2 Images — allows you to display two images in the Image Display area. Keyboard shortcut: **2**

4 Images — allows you to display four images in the Image Display area. Keyboard shortcut: **4**

8 Images — allows you to display eight images in the Image Display area. Keyboard shortcut: **8**

Scale to Gray — toggles the scale to gray mode on and off. Selecting **Scale to Gray** will increase the quality of the bi-tonal images displayed on lower resolution monitors. This option has no effect on the image files.

Fit Images to Window — fits each image to the Image Display window regardless of its original size. Keyboard shortcut: **F**

NOTE: Fit Images to Window may not work perfectly when scanning either very long documents (e.g., greater than 20 inches) and/or scanning at a high resolution (e.g., 600 dpi). Images that are not fully displayed in the window can still be viewed in their entirety by scrolling within the image window.

Zoom In — enlarges an image by a fixed percentage according to the Zoom Step setting. Keyboard shortcut: **+**

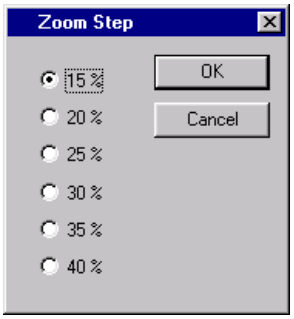
Zoom Out — reduces an image by a fixed percentage according to the Zoom Step setting. Keyboard shortcut: **-**

Zoom Step — accesses the Zoom Step dialog box which allows you to select a percentage to scale. Options range from 15 to 40% in increments of 5%.

Changing zoom settings

To change the settings in the Zoom Step dialog box, proceed as follows.

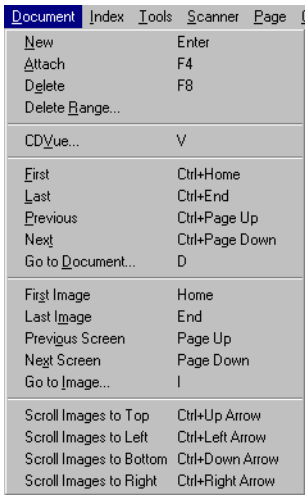
1. Select **View>Zoom Step**. The Zoom Step dialog box appears.



2. Click on the setting you desire.
3. Click **OK**. The zoom setting will be reduced or enlarged based upon the percentage you selected.

Document menu

The Document menu provides the following options:



New — creates a new document with a document number equal to the last document number + 1. Keyboard shortcut: **Enter**

NOTE: In Capture Software for some scanners, selecting **New** also enables the scanner and starts the scanner transport/feeder or flatbed.

Attach — appends the next scanned page to the current document. Keyboard shortcut: **F4**

Delete — deletes the current document. Keyboard shortcut: **F8**

Delete Range — accesses the Delete Documents dialog box which allows you to delete a range of documents in the batch.

CDVue — this option is only available when you use the IBS/ Document CD Native Scan structure. When this option is available, you can search and view documents in the current batch with the CDVue application. This is useful for testing the Document Index data that has been generated for the batch. Keyboard shortcut: **V**

First — goes to the first document in a batch. Keyboard shortcut: **Ctrl+Home**

Last — goes to the last document in a batch. Keyboard shortcut: **Ctrl+End**

Previous — moves to the previous document number containing images. Keyboard shortcut: **Ctrl+Page Up**

Next — moves to the next document number containing images. Keyboard shortcut: **Ctrl+Page Down**

Go to Document — accesses the Go to Document dialog box which allows you to enter the number of the document that you want to display. You can also go to document numbers that do not contain any images. Keyboard shortcut: **D**

First Image — goes to the first image of a document. Keyboard shortcut: **Home**

Last Image — goes to the last image of a document. Keyboard shortcut: **End**

Previous Screen — goes to the previous screen. Keyboard shortcut: **Page Up**

Next Screen — goes to the next screen. Keyboard shortcut: **Page Down**

Go to Image — accesses the Go to Image dialog box which allows you to enter the number of the image you want to display first in the Image Display area. Keyboard shortcut: **I**

Scroll Images to Top — scrolls through all of the images in the Image Display area to the top. Keyboard shortcut: **Ctrl+Up Arrow**

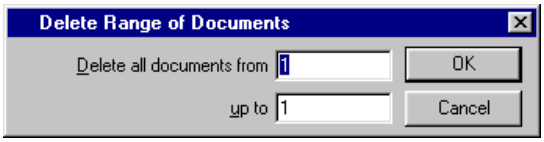
Scroll Images to Left — scrolls through all of the images in the Image Display area to the left. Keyboard shortcut: **Ctrl+Left Arrow**

Scroll Images to Bottom — scrolls through all of the images in the Image Display area to the bottom. Keyboard shortcut: **Ctrl+Down Arrow**

Scroll Images to Right — scrolls through all of the images in the Image Display area to the right. Keyboard shortcut: **Ctrl+Right Arrow**

Deleting a range of pages

1. Select **Document>Delete Range**. The Delete Documents dialog box appears.



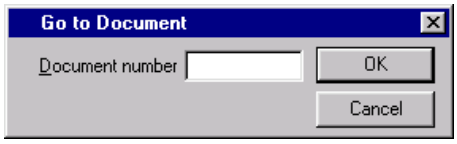
2. Enter the beginning number of the document you want to delete in the **Delete all documents from** field.
3. Enter the ending number of the group of documents you want to delete in the **up to** field.
4. Click **OK** when finished.

Moving to a specific document or image

The Go to Document and Go to Images options are available when you want to move directly to a specific document or image.

To go to a specific document:

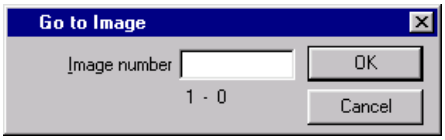
1. Select **Document>Go to Document**. The Go to Document dialog box appears.



2. Enter the document number you want to go to.
3. Click **OK**.

To go to a specific image:

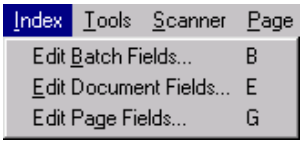
1. Select **Document>Go to Image**. The Go to Image dialog box appears.



2. Enter the image number you want to go to.
3. Click **OK**.

Index menu

The Index menu provides access to the index fields at batch, document, and page levels.



Edit Batch Fields — displays the Batch Index Fields dialog box.

Edit Document Fields — displays the Document Index Fields dialog box.

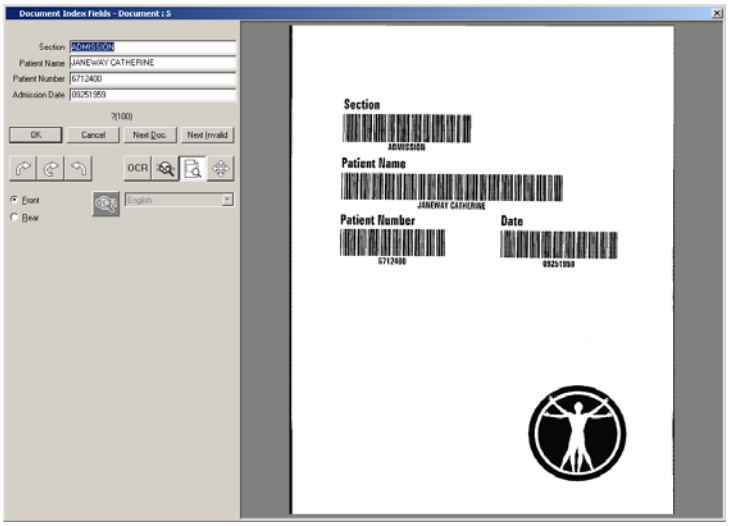
Edit Page Fields — displays the Page Index Fields dialog box. This function is not currently available, as page level index fields are not available.

NOTE: If using *Kodak* Capture Software Lite only one index field can be defined.

To enter or change a batch or document index field:

1. Choose **Edit Batch Fields** or **Edit Document Fields**, depending upon which fields you would like to edit.

   The appropriate dialog box appears, containing an entry and value, if one exists, for each index field defined during Application setup. In addition, the first page of the batch/document (for batch/document index fields) is displayed next to the index field entries.



2. Change any information in the fields as required. As you tab from field to field, the audit rules for the field are displayed (e.g., A(4) to enter up to four alphabetic characters).

3. Click **OK** to finish editing the current document/batch index fields.The Image Display area of the Capture Software main window appears.

NOTE: Select **Cancel** to ignore any changes that were made. The Image Display area of the Capture Software main window appears.

For document index fields, two additional options are available:

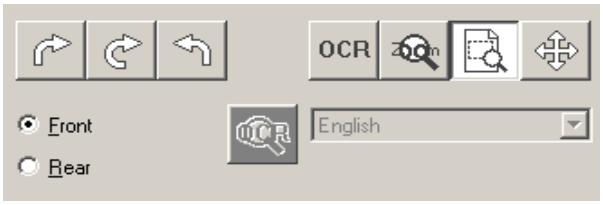
- Select **Next Doc** to edit the index fields for the next document in a batch. This option is useful for manual data entry indexing after scanning has been completed.
- Select **Next Invalid** to go to the next document (or next field in the current document) that has an invalid field value. This option is useful for index correction after scanning has been completed.

NOTE: The last button used (**Next Doc** or **Next Invalid**) remains active, allowing you to perform post-scanning indexing functions quickly using the Enter key without using the mouse.

Image Display options

When editing index fields, several image display options are available. Image display options are accessible from the Image Display Tool bar and an Image Display context-sensitive menu.

Image Display Tool bar



From left to right:

- The **rotation buttons** rotate the displayed image 90°, 180°, or 270° clockwise. These buttons are useful to orient the image in the direction of the index data (e.g., bar code data) that needs to be entered/corrected.

  IMPORTANT: When an image is rotated and the index field changes are saved (i.e., not canceled), any rotation of the image is also saved.

- The OCR tool allows you to perform Drag 'n Drop indexing via OCR without the need to key data enter the index value. After enabling the OCR tool, left-click on the image and draw a rectangle around the index data to be captured.

  To properly OCR special language-specific characters (e.g., Ç or ü) or MICR code characters select the appropriate language or MICR font from the drop-down list.

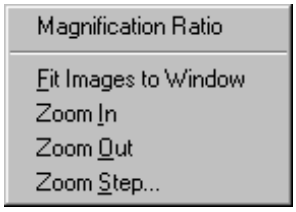
  Click on the OCR zoom button to enlarge the display of the index data captured for the current field. This allows the user to more clearly see difficult-to-read special language-specific characters.

  NOTES:

  - Drag 'n Drop indexing with OCR is not available for i800 Series Scanners, *Imagelink* Scanners or *Digital Science* Scanners (e.g., DS3500 or IL923).
  - Drag 'n Drop indexing will not produce correct results when performed in color or grayscale images.

- The **Zoom image with magnifying glass** tool is the same as the tool on the Capture Software main window.
- The **Zoom image on rectangle** tool allows you to draw a rectangle around a portion of the image that you want zoomed for display when editing index fields. This zoom setting is saved per index field. As a result, you can define a zoom zone for each index field and the image display automatically zooms to the appropriate part of the image when that field is edited.
- The **Scroll image** tool is the same as the tool on the Capture Software main window. The results of scrolling are saved per index field.
- The **Front** and **Rear** radio buttons control which side of a duplex page is displayed when editing index fields. The front/rear setting is saved per index field. As a result, when tabbing between index fields, the image display can automatically switch from front to rear and back again.

Image Display context-sensitive menu



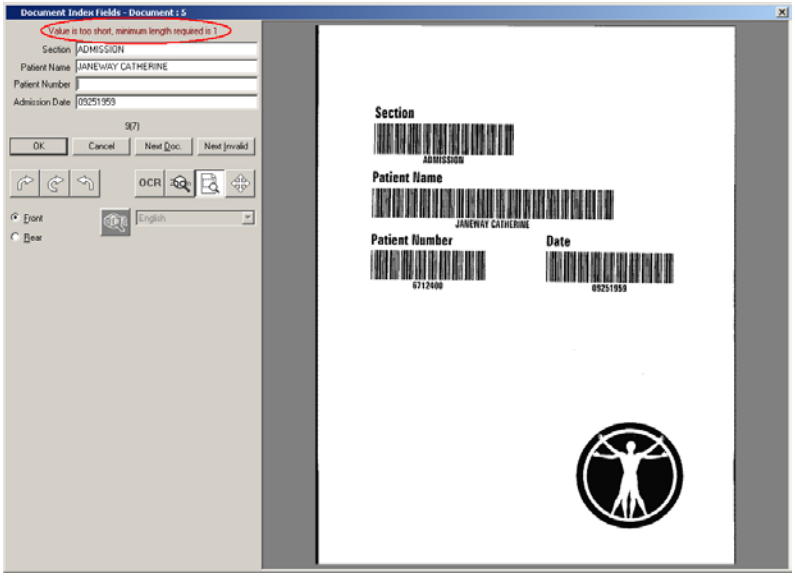
These menu options function the same as they do on the Capture Software main window image context-sensitive menu. Any adjustments to image display by zooming in/out or fit image to window are saved **per index field**.

NOTES: All adjustments to image display from the tool bar or the context-sensitive menu are automatically saved, per Capture Software application, when leaving the Batch/Document Index Fields dialog box. As a result, the next time fields are edited, the image display settings used previously remain in effect.

The Batch and Document Index Fields dialog boxes can be resized and moved to a different position on the screen. When leaving the dialog box, the size and on-screen positions are automatically saved. As a result, the next time index fields are edited, the location and size of the dialog box used previously remain in effect.

Index correction during scanning

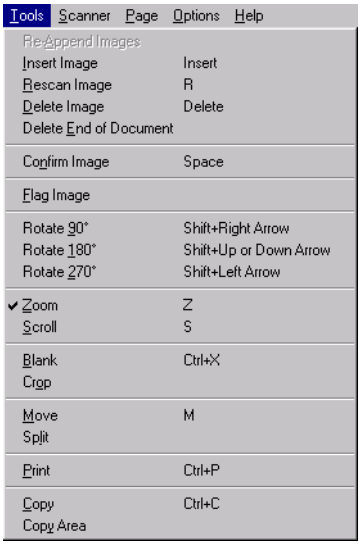
When index fields are defined with the **Check Field During Scanning** option enabled, each index field value is audited against the input mask and minimum length requirements for the field. If an index field audit fails, scanning will be interrupted and you will be prompted to correct the index data before scanning can be resumed.



If the **Stop Scanner on Error** option is enabled for the application, the scanner must be manually restarted (green button on the Scanner bar) to resume scanning. Otherwise, scanning will automatically resume when the index field is corrected.

Tools menu

Following is a brief summary of each option on the Tools menu. The Tool bar also provides most of these options. See the section entitled “Tool bar” in this chapter for an explanation of the Tool bar buttons.



Re-Append Images* — this option is available only when the Insert Image tool is used. Use this option after **Insert** is completed to reattach the ending images of a document with the inserted images.

Insert Image* — inserts additional pages into a scanned document. Keyboard shortcut: **Insert**

Rescan Image* — rescans a selected image. Keyboard shortcut: **R**

Delete Image — deletes one or more images selected inside a document. For example, blank images can be deleted from a double-sided document; All remaining images are renumbered after the selected images are deleted. Keyboard shortcut: **Delete**

Delete End of Document — deletes the selected image and all subsequent images of a document. ***Images are removed from your hard disk. You cannot undo this function.***

Confirm Image — allows you to confirm unchangeable actions (no undo). Actions you cannot undo, and therefore must confirm, are: deleting and cropping images, blanking parts of one or more images, and copying parts of an image to the Windows clipboard. Keyboard shortcut: **Space**

Rotate 90° — rotates an image 90 degrees to the right. Keyboard shortcut: **Shift+Right Arrow**

Rotate 180° — rotates an image 180 degrees. Keyboard shortcut: **Shift+Up or Down Arrow**

Rotate 270° — rotates an image 270 degrees to the right (or 90 degrees to the left). Keyboard shortcut: **Shift+Left Arrow**

* Not available for *Kodak* Capture Software Lite.

Zoom — enlarges a portion of an image. When you select **Zoom**, a magnifying glass will be displayed. You can enlarge any area where you place the magnifying glass. You can also select other magnification ratios (100, 150, 200, or 250%) by right-clicking on the image and selecting **Magnification Ratio** from the context-sensitive menu. The Magnify tool does not slide between images. Keyboard shortcut: **Z**

NOTE: Using Zoom on very large (i.e., over 1 MB) color or grayscale images may result in the magnified area showing all gray. This depends upon the computer resources (e.g., amount of memory) and Windows operating system on the host PC.

Scroll — scrolls in any direction within an image that is partially hidden. This is useful when a single image is too large to be displayed fully on the screen. Keyboard shortcut: **S**

Blank* — use Blank to select an area of an image that you want to remove from the image. Keyboard shortcut: **Ctrl+X**

Crop* — allows you to draw a rectangle around a portion of an image retaining only the part of the image you want.

Move* — allows you to move a page (both front and rear images) from one location to another location within the document. To move an image, right-click on the image and select **Move image** on the context-sensitive menu to change the move tool setting. Keyboard shortcut: **M**

Split* — splits a document into two documents.

Print — prints a document or specific images within a document. Only black-and-white images can be printed at this time. Keyboard shortcut: **Ctrl+P**

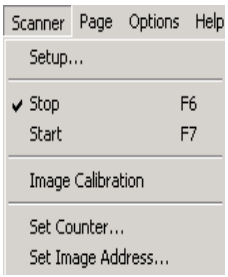
Copy* — copies an image (in its highest resolution) to the Windows clipboard. Keyboard shortcut: **Ctrl+C**

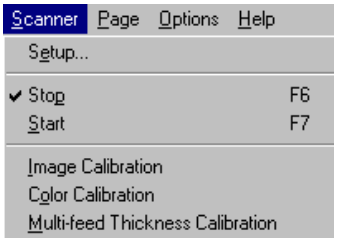
Copy Area* — copies a specific area of an image to the Windows clipboard.

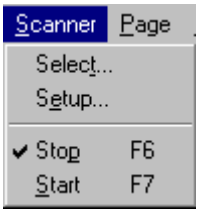
* Not available for *Kodak* Capture Software Lite.

Scanner menu

The Scanner menu is different depending on what scanner you have. The following provides a description of the functions listed on these menus. In some cases, you will need to refer to your scanner-specific Appendix for more detailed information.







Select — accesses the Scanner Select dialog box which allows you to choose the scanner you want to use. This is necessary when more than one scanner is connected to the host PC or you are running in emulation mode. Refer to your scanner-specific Appendix for procedures on selecting a scanner.

Setup — accesses the Setup dialog box specific to the scanner you selected. From this dialog box you can set the specific parameters for the selected scanner.

NOTE: This menu option is not available for i1200, i1300, i1400 and i1800 Series Scanners. Scanner-specific parameters for these scanners are accessible through the Scanner Settings for each Page Setup.

Refer to your scanner-specific Appendix for procedures on setting up your scanner.

Stop — clears and stops the transport and disables the scanner. Keyboard shortcut: **F6**

Start — enables the scanner and starts the transport. Keyboard shortcut: **F7**

Calibration/Image Calibration — calibrates the scanner. You may need to calibrate the scanner if you are experiencing problems with image quality.

NOTE: This function is only available in Capture Software for the 3000/4000 and i100, i200, i600 and i800 Series Scanners.

Color Calibration — calibrates the 3590C or 4500 scanner for color image quality.

Multi-feed Thickness Calibration — allows you to calibrate a 3000/4000 Series Scanner for multi-feed document detection based on the thickness of a scanned sheet of paper.

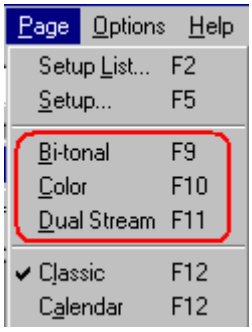
When prompted, feed a sample sheet into the scanner. When Multi-feed Thickness Detection is actuated after calibration, the scanner warns you with an audible alarm whenever a scanned sheet of paper is detected to be thicker (commonly caused by a multi-feed) than the sheet used for calibration. See Chapter 9, *Page Setup*, for information about actuating Multi-feed Thickness Detection.

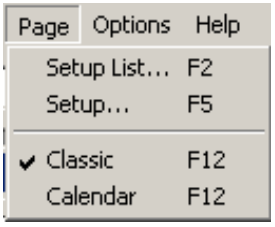
Set Counter — accesses the Set Counter dialog box which allows you to change the sequential counter value assigned (and optionally printed) to the next page scanned. Refer to your scanner-specific Appendix for more information.

Set Image Address — accesses the Set Image Address dialog box which allows you to change the image address that is displayed on the i800 Series Scanner or i1860 Scanner (and optionally printed). Refer to your scanner-specific Appendix for more information.

Page menu

The following Page menu options are available. Most of these options can also be selected by using the Scanner bar. Depending upon your scanner, one of the following Page menus will be displayed. The keyboard shortcuts (e.g., F9) are listed to the right of each menu option.





Setup List — accesses a drop-down list of all Page Setup names that have been defined. Allows you to select a page setup to use for the application. Once selected from the Setup List, Capture Software automatically downloads the page properties and starts the scanner.

Setup — displays the Page Setup dialog box which enables you to set up the properties of the pages to be scanned. For more information see Chapter 9, *Setting up Page Properties*.

Front — enables/disables simplex, front only scanning.

Rear — enables/disables simplex, rear only scanning.

Duplex — scans double-sided pages with a duplex scanner.

Color — enables/disables color scanning. Both front and rear Color are enabled/disabled. Enabling Color automatically disables Grayscale, if Grayscale is enabled. Selecting this option toggles dual stream scanning when Bi-tonal is also enabled.

Grayscale — enables/disables grayscale scanning. Both front and rear Grayscale are enabled/disabled. Enabling Grayscale automatically disables Color, if Color is enabled. Selecting this option toggles dual stream scanning when Bi-tonal is also enabled.

Bi-tonal — enables/disables bi-tonal scanning. Both front and rear Bi-tonal are enabled/disabled. Selecting this option toggles dual stream scanning when Color or Grayscale is also enabled.

Dual Stream — enables/disables dual stream scanning (both front and rear color and bi-tonal).

NOTE: The Page menu options toggle the Front, Rear, Duplex and Color, Grayscale, Bi-tonal. Dual Stream settings are not available for the i1200, i1300 and i1800 Series Scanners. Users must select a different Page Setup if they want to switch, for example, from bi-tonal to color scanning.

Classic — duplex mode typically associated with multi-page documents; such as, reports, postcards, articles. See the section entitled “About Duplex modes” for more information.

Calendar — duplex mode typically associated with documents such as presentation handouts, statistical and financial reports, project planning reports. *Calendar duplex mode is only available for bi-tonal scanning*. See the section entitled “About Duplex modes” for more information.

NOTE: **Calendar** duplex mode is not available with *Kodak* Capture Software Lite.

About Duplex modes

The way a document is printed influences the orientation of the images produced by the scanner. There are two different ways of printing duplex documents.

Classic duplex format is typically associated with multi-page reports. Reports, postcards, articles, etc. are all printed according to the classic duplex format.

Calendar duplex format is more unusual. It is used for presentation handouts, statistical and financial reports, project planning reports, etc.

The Duplex buttons (on the Tool bar)

To use these buttons, look at your original and compare it with the picture on the duplex buttons. Click on the button that corresponds with your original.

The duplex mode only influences the way the front image will be rotated in relation with the rear image. It does not set the overall rotation of the document (0°, 90°, 180°, or 270°). Rotation can be set up in the Page Setup dialog box.

The first button handles classic duplex formats:

- A 0° rotated front corresponds with a 0° rotated rear.
- A 180° rotated front corresponds with a 180° rotated rear.
- A 90° rotated front corresponds with a 270° rotated rear.
- A 270° rotated front corresponds with a 90° rotated rear.

The second button handles all calendar duplex formats:

- A 0° rotated front corresponds with a 180° rotated rear.
- A 180° rotated front corresponds with a 0° rotated rear.
- A 90° rotated front corresponds with a 90° rotated rear.
- A 270° rotated front corresponds with a 270° rotated rear.

If you have images in the current document and you toggle the duplex mode buttons, the message *Do you want to apply the selected duplex mode to the already scanned images in the current document?* appears.

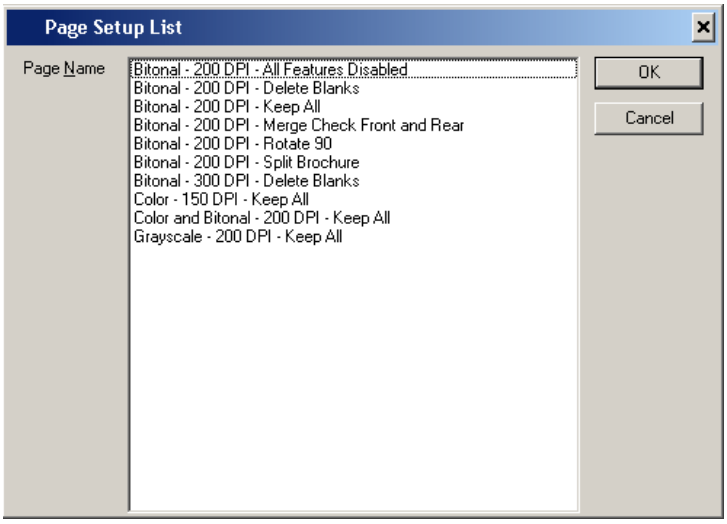
If you select **Yes**, Capture Software will rotate the images in the current document according to the selected duplex mode.

NOTES:

- With color/grayscale scanners only classic duplex mode is supported.
- Calendar duplex mode is not available with *Kodak* Capture Software Lite.

Selecting a page setup

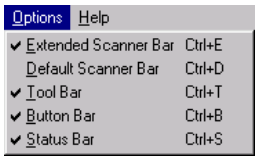
Capture Software comes with several pre-defined page setups. The list of pre-defined page setups will vary depending upon which Capture Software product and *Kodak* Scanner are being used. To access the Page Setup list from the main Capture Software window, select **Page>Setup List**.


Page Setup List
Page Name
Bitonal - 200 DPI - All Features Disabled
Bitonal - 200 DPI - Delete Blanks
Bitonal - 200 DPI - Keep All
Bitonal - 200 DPI - Merge Check Front and Rear
Bitonal - 200 DPI - Rotate 90
Bitonal - 200 DPI - Split Brochure
Bitonal - 300 DPI - Delete Blanks
Color - 150 DPI - Keep All
Color and Bitonal - 200 DPI - Keep All
Grayscale - 200 DPI - Keep All
OK
Cancel

To select a page setup from the drop-down list either use the mouse, arrow keys or enter the first letters of the page setup name. Capture Software automatically scrolls down the Page Setup List until a unique page setup is found.

Options menu

The Options menu allows you to customize the Capture Software screen layout and display or hide the Scanner bar, Tool bar, Button bar, or Status bar. For more information about each of these bars, see the appropriate section within this chapter.



Extended Scanner bar — in addition to the Default Scanner bar, the Extended Scanner bar displays threshold and contrast settings. See the section entitled “Scanner bar” later in this chapter. Keyboard shortcut: **Ctrl+E**

Default Scanner bar — the Default Scanner bar displays the Start and Stop buttons, the Duplex buttons, the Page name information and the front and rear scan options. Keyboard shortcut: **Ctrl+C**

NOTE: For the i1200, i1300, i1400 and i1800 Series Scanners, there is only a Default Scanner bar that displays the Start and Stop buttons, the Duplex buttons and the Page name information.

Tool bar — the Tool bar provides shortcuts to commonly used image manipulation commands in Capture Software. Clicking on one of these buttons is equivalent to selecting the corresponding command from the menu bar. See the section entitled “Tool bar” later in this chapter. Keyboard shortcut: **Ctrl+C**

Button bar — the Button bar provides shortcuts to commonly used image display and navigation commands in Capture Software. Clicking on one of these buttons is equivalent to selecting the corresponding command from the menu bar. See the section entitled “Button bar” later in this chapter. Keyboard shortcut: **Ctrl+P**

Status bar — the Status bar indicates the size of the last-scanned image or the image you clicked on last. See the section entitled “Status bar” later in this chapter. Keyboard shortcut: **Ctrl+S**

Help menu

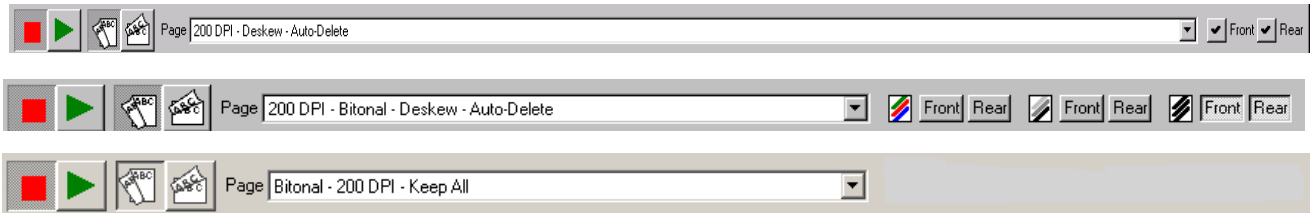
The Help menu provides access to the About box.

The About box lists all Capture Software program libraries with their corresponding version number and description. The Capture Software program version number is also displayed in the About box.

NOTE: If your Capture Software installation includes a hardware key (or dongle), the About box also displays the serial number of the hardware key.

Scanner bar

The Scanner bar provides tools for controlling the scanner from within Capture Software. If the Scanner bar is not visible, open the Options menu and click on the Scanner bar option. Depending on your scanner, one of the following default scanner bars will be displayed.



Default Scanner bar

The Default Scanner bar provides the following options. **All options listed are not available on all scanners.**

Button	Description
	Stop — clears and stops the transport/feeder and disables the scanner.
	Start — enables the scanner and starts the transport/feeder.
	Classic — duplex scanning format typically associated with multi-page reports. Reports, postcards, articles, etc., are all printed according to the classic duplex format.
	Calendar* — duplex scanning format typically used for presentation handouts, statistical and financial reports, project planning reports, etc. *Calendar duplex mode is only available for bi-tonal scanning.*
	Page — displays the current/active page setup. Use the drop-down list button to select a different page setup.
	Front — enables/disables simplex, front only scanning.
	Rear — enables/disables simplex, rear only scanning.
	Bi-tonal scanning — enables/disables front and/or rear bi-tonal scanning.
	Color scanning — enables/disables front and/or rear color scanning.
	Grayscale scanning — enables/disables front and/or rear grayscale scanning.

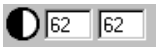
NOTES:

- Color and Grayscale scanning cannot be enabled at the same time.

* Not available with *Kodak* Capture Software Lite.

Extended Scanner bar

The Extended Scanner bar has all of the options listed previously plus the following options. Depending on your scanner, one of the following extended scanner bars will be displayed.

Button	Description
	Threshold — controls the lightness and darkness of the background in an image. Valid values are 0 to 255. ***For i50/i60/i80 Scanners:*** This setting is available for bi-tonal and color images. Valid values are -100 to 100.
	Contrast — contrast enhances the edges contained in a document. The higher the contrast level, the more the image edges will be enhanced. Valid values are 0 to 100. ***For i50/i60/i80 Scanners:*** Valid values are -100 to 100.
	Threshold — controls the lightness and darkness of the background in a bi-tonal image. Valid values are 0 to 255. Enter a front side threshold value in the text box on the left. Enter a rear side threshold value in the text box on the right.
	**Contrast** — contrast enhances the edges contained in a document. The higher the contrast level, the more the image edges will be enhanced. Valid values are 0 to 100. Enter a front side contrast value in the text box on the left. Enter a rear side contrast value in the text box on the right.
	iThresholding — activates the iThresholding feature. When iThresholding is enabled, the Threshold ( ) entry box is disabled. With iThresholding, the scanner automatically determines the optional Threshold setting for each scanned page, thereby improving overall scanning productivity and image quality. NOTE: iThresholding is not available on all scanners.

NOTES:

- Changing the duplex scanning format, front and rear selection, and threshold/contrast settings from the Scanner bar are temporary settings for the current scanning session and do not affect the currently selected page setup.
- There is no Extended Scanner bar for the i1200, i1300, i1400 and i1800 Series Scanners.

Scanner bar context-sensitive menu

If you position the mouse cursor on the Scanner bar and click the right mouse button, a context-sensitive menu is displayed which allows you to edit the currently selected Page Setup, display either the Default or Extended Scanner bar and display either large or small buttons.

Tool bar

If the Tool bar is not displayed, it can be displayed by choosing **Options>Tool bar**. Most of these options can also be accessed from the Tools menu.

NOTE: The following tool bar options are not available for *Kodak* Capture Software Lite: **Re-Append Images, Insert Images, Rescan, Blank, Crop, Move, Split, Print** or **Copy area**.

Using the Tool bar

Following are descriptions and procedures for using the Tool bar options.

Re-Append images — re-appends the remaining images of a document after an Insert operation.

Insert image — inserts additional images into a scanned document.

1. Select the **Insert image** tool (or press **Insert**).
2. Click on the page (front image of the page) where you want to insert images.

   The images will be inserted before this page. The selected page and all following images are placed in a temporary buffer. The **Re-Append images** tool appears at the left side of the Tool bar.

   When you click on the rear of a page that also contains a front, the message *Inserting images between a front and a rear of a page is not allowed* appears.
3. Scan the images you want to insert.
4. When you have finished scanning, recall the images in the temporary buffer by clicking on the **Re-Append images** tool or the **Confirmation** tool.

Rescan — rescans images in a document.

1. Select the **Rescan** tool (or press **R**).
2. Click on the images to be rescanned.

   If only the front or rear scanner is enabled, scanned images will replace all selected images until no selected images are available. Subsequent scanned images will be appended to the document. When a front image replaces a rear image, the new scanned image will also be marked as a rear and vice versa.

   When you use the scanner in duplex mode, re-scan is done on a page-per-page basis. Capture Software analyzes each selected page and replaces fronts by fronts and rears by rears. When the selection does not include certain rears or fronts, Capture Software discards the corresponding scanned images. Once all selected images are replaced, subsequent scanned pages will be appended to the document.

Rescanning binarized color pages on Scanners 3590C/4500

When using **Rescan** on color pages that have been binarized (i.e., converted to black and white for MultiStream™ processing), follow the guidelines below. These guidelines are important because when a scanned color page is binarized, the page can contain up to four images (front bi-tonal, rear bi-tonal, front color, and rear color).

- If only color images need to be rescanned, select a page setup that has binarization disabled (e.g., the *Color 150 DPI – Deskew – Keep All Images*).
- If only binarized images need to be rescanned, (e.g., to adjust the Contrast or Threshold), select a page setup where only the bi-tonal images are kept (e.g., the *Color 150 DPI – Deskew – Binary Only for Rescan*).
- If both color and bi-tonal images need to be rescanned, highlight both a bi-tonal and a color image for rescan. Select a page setup where binarization has been enabled (e.g., the *Color 150 DPI – Deskew – Dual Stream*).
- When rescanning binarized color pages on the Color Scanner 3590C, highlight **all three** images of the page and select a page setup where binarization had been enabled (e.g., *Color 150 DPI – Deskew – Dual Stream*).

Rescanning when using dual stream

When scanning dual stream (both front and rear color and bi-tonal) with a color scanner, the following guidelines must be followed to ensure a successful rescan operation:

- After highlighting the images of the page that you want rescanned, go to the Scanner bar and use the Front/Rear buttons to enable only those images that are highlighted for rescan.

  For example, if only the Front bi-tonal and Front color images need to be rescanned, then the Scanner bar would look like the example below when the scanner is restarted.

  Similarly, if only the Front and Rear bi-tonal images need to be rescanned, then the Scanner bar would look like the example below when the scanner is restarted.

IMPORTANT: Not following these color rescanning guidelines may result in additional images being appended to the end of the current document.

NOTE: For i1200, i1300, i1400 and i1800 Series Scanners, the Front/Rear and Bi-tonal/Color buttons are not available in the Scanner bar. As a result, to ensure paper rescanning, you must select a Page Setup from the Page Setup list that enables only those images that are highlighted for rescan.

Delete image — deletes one or more images. For example, use this tool for the deletion of blank images from a double-sided document. All remaining images after the selected images are deleted are renumbered.

1. Click on the **Delete image** tool (or press **Delete**).
2. Click on the images you want to delete.
3. Click the **Confirmation** tool (or press the space bar) to confirm deletion of the selected pages.

IMPORTANT: Once confirmed, the selected pages are removed from your system's hard disk. You cannot undo this action.

Delete end of document — deletes the selected image and all subsequent images of a document. This action cannot be undone.

1. Click on the **Delete end of document** tool.

   The message *Using this tool may lose a lot of images. Continue anyway?* appears.
2. Click **Yes**.
3. Click on any image to delete that image, and all subsequent images.

IMPORTANT: The images are removed from your system's hard disk.

Confirmation — confirms an unchangeable action (no undo). Confirmation is required for the Delete, Blank, Crop, and Copy Area.

The **Confirmation** tool also appends images from the insert buffer.

Rotate — rotates the selected image.

The **Rotate** tools rotate images 90° right, 180°, or 90° left (270° right). This tool physically rotates the image file, so that when viewed later in any application, it has the same orientation as displayed in Capture Software.

1. Select the desired **Rotate** tool.
2. Click on the image you want to rotate. If you want to rotate all images on the screen or undo the action, select the appropriate function from the Image context sensitive menu (right-clicking on the image).

Zoom — enlarges a portion of an image. When you select **Zoom**, a magnifying glass will be displayed. The Zoom tool does not slide between images.

1. Select the **Zoom** tool and click and hold the left mouse button anywhere on an image. The zone where you clicked is magnified.
2. You can select other **Magnification ratios** through the Image context sensitive menu (right-clicking on the image).

If you want to magnify a different displayed image, click and hold the left mouse button anywhere on that image.

NOTE: Using **Zoom** on very large (i.e., over 1 MB) color or grayscale images may result in the magnified area showing all gray. This will depend upon the computer resources (e.g., amount of memory) and Windows operating system on the host PC. (This occurs more often on Windows 98/ME systems.)

Scroll — scrolls in any direction within an image that is partially hidden. This is useful when a single image is too large to be displayed fully on the screen.

The arrow keys perform the same function as the **Scroll** tool. You can use the Control key with an arrow key to move the display immediately to the upper, lower, right, or left portion of an image.

If you are working in a multi-image display mode (2, 4, or 8 images), you can latch every image to scroll to the same relative position. To do this, select the **Scroll Images to Same Position** option from the Image context sensitive menu (right-clicking on the image).

Blank — blanks out a specific part of an image. This is useful to clean up images or remove confidential information.

1. Select the **Blank** tool.
2. Point to the upper left corner of the area you want to blank out.
3. Click and drag the mouse diagonally over the area you want to blank out.

   NOTE: If you want to blank out the same area on all images on the screen, draw the rectangle on any of the images and duplicate the rectangle by selecting **Apply Blank Rectangle to Screen** from the Image context sensitive menu (right-clicking on the image).

4. Click on the **Confirmation** tool. **You cannot undo this action.**

You can also draw different rectangles on different images.

Crop — crops an image by drawing a rectangle around a specific area. All information outside of this rectangle will be discarded. Use this tool to keep only the significant part of an image (i.e., newspaper articles).

1. Select the **Crop** tool.
2. Point to the upper left corner of the area you want to keep.
3. Click and drag the mouse diagonally over the area you want to keep.
4. Release the mouse button and a rectangle is displayed. If it is not acceptable, you can redraw the rectangle (only one rectangle per image) by repeating the above actions.
5. Click on the **Confirmation** tool. The image(s) are cropped to the area within the rectangle(s). **You cannot undo this action.**

   NOTE: If you want to crop the same area on all images on the screen, use the appropriate option from the Image context sensitive menu (right-clicking on the image).

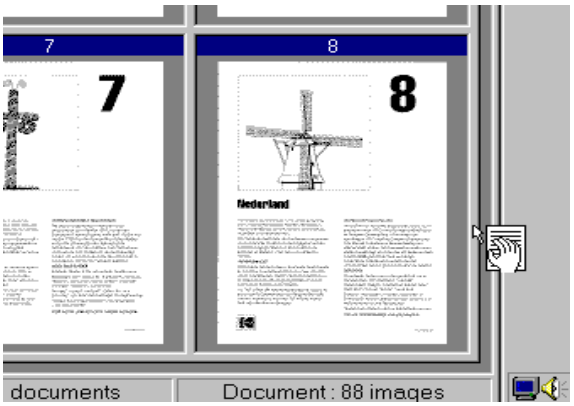
Move — moves a page/image or a consecutive range of pages/ images to another location.

- Select the **Move** tool, then click on one of the images of the page (front or rear) and drag and drop the page to its new location.

If you drop a page on top of another page, it is inserted before that page. It does not matter whether you drop the page on top of the front or rear image of the page, it will always be inserted before the first image of the page.

When you drop the rear image of a page on the front image of the same page, front and rears are swapped. When you drop the front image of a page on top of the image following the same page, fronts and rears are also swapped.

To place a page after the last image on your screen, position the hand-pointer clearly after the last image (see below).



You can move a page to any location within a document (e.g., from position 1 to position 100). All images will be renumbered after you move a page to a new location.

To change the Move tool so it will move individual images, as opposed to pages, select the Move tool and right-click on an image. Select **Move image** on the context-sensitive menu to change the move tool setting.

NOTE: When using the **Move** tool on pages with more than two images (i.e., pages that have been split into four or six images or color pages that have been scanned in dual stream) using only **Move image** is recommended. **Move page** is designed to move corresponding pairs of images. Using **Move page** on split, or dual stream pages may cause unpredictable results.

Following are some ways to move a page from one location to another within a document.

1. Select one of the images of the page (front or rear) you want to move and hold the left mouse button.
2. Drag the page beyond the upper or lower borders of the screen to move it to its new destination. Capture Software paginates through the document automatically, as long as you keep the tool beyond the outer borders.
3. Drop the page on top of the page in front of which you want to insert it.

OR

1. Select the page you want to move and press the Home, End, Page Up, or Page Down key to navigate to the location to move the page.
2. Drop the page on top of the page in front of which you want to insert it.

OR

1. Select the page you want to move with the **Move** tool.
2. Press **0** on the numeric keypad followed by the number to which you want to move the page (e.g., **0100** to navigate to image position **100**). When you press **0**, the text **Goto image: 0** is displayed in the bottom left corner of the screen. This text is updated as you type the image number.
3. Press **Enter** to move to the new location or press **ESC** to cancel the Go to function.
4. Drop the page on top of the page in front of which you want to insert it.

Split — splits a document into two documents.

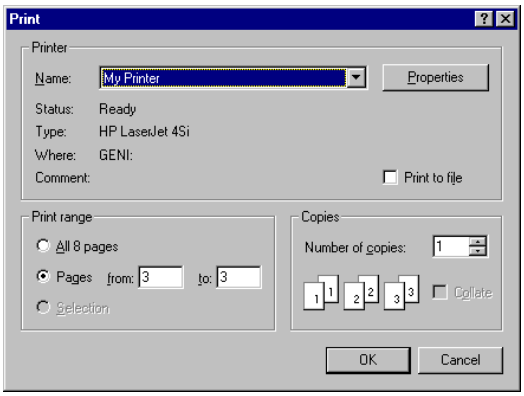
If you do not separate documents with patch codes, bar codes, or after X pages, you will start a new document by using the **New Document** button. If you forget to do this, the next document is appended to the current document. To correct this, cut off the part belonging to the next document with the **Split** tool to create a new document.

1. Select the **Split** tool and click on the first image in the new document. That image and all subsequent images are cut from the screen and moved to a new document. The new document is appended to the end of the current batch. Capture Software shows the new document with the cut images.
2. When you click on the rear of a page that also contains a front, the message *Splitting a document in the middle of a front and a rear of a page is not allowed* appears.

If you want to undo this action, select the **Undo** option from the Image context sensitive menu (right-clicking on the image) and the cut images are returned in their original document.

Print — prints a complete document or specific images within a document.

1. Click on the **Print** tool.
2. Click on the image you want to print. A standard Windows Print dialog box is displayed.



3. Select the image page or pages that you want to print.
4. Select any of the other options/properties on the Print dialog box.
5. Click **OK**.

NOTE: Only black-and-white images can be printed at this time.

Copy image — copies a complete image to the Windows clipboard.

- Click on the **Copy image** tool and select one of the images in your document.

Copy area — copies an area of an image to the Windows clipboard.

1. Click on the **Copy area** tool.
2. Draw a selection rectangle around the area you want to copy.
3. Click on the **Confirmation** tool.

Tool bar context-sensitive menu

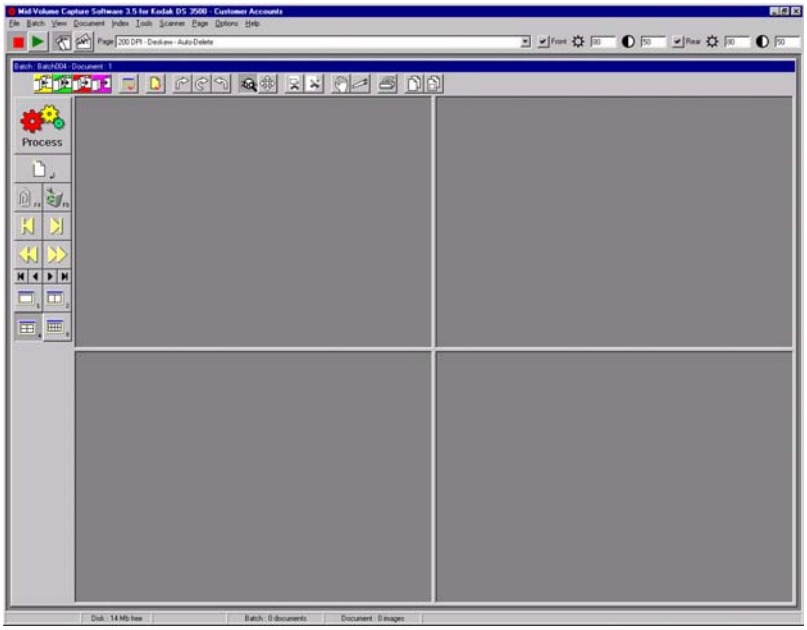
If you position the mouse cursor on the Tool bar and click the right-mouse button, the context-sensitive menu is displayed which allows you to display either **Large or Small Buttons**.

Document title bar

The Document title bar shows the current document number and batch name. If you right-click the mouse button, you can access the Properties option. Properties will display a full path name of the current document, number of images and number of pages in the document.

Image display area

The Image display area is the area where your images are displayed. How they are displayed is dependent upon what you have set up from the View menu. You can view 1, 2, 4, or 8 images at a time. The example below shows a 4-image display.



NOTES: Every page scanned in Capture Software is displayed on-the-fly during scanning.

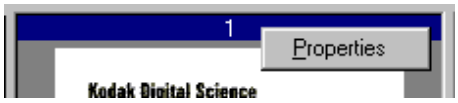
When scanned color pages from a 3590C or 4500 Scanner are binarized (i.e., converted to black and white for MultiStream™ processing), the bi-tonal images of the scanned page are displayed first, followed by the color images.

When dual-stream scanning (simultaneous color and black-and-white scanning), the image display order is determined by the currently selected page setup. For more information, refer to Chapter 9, *Setting Up Page Properties*.

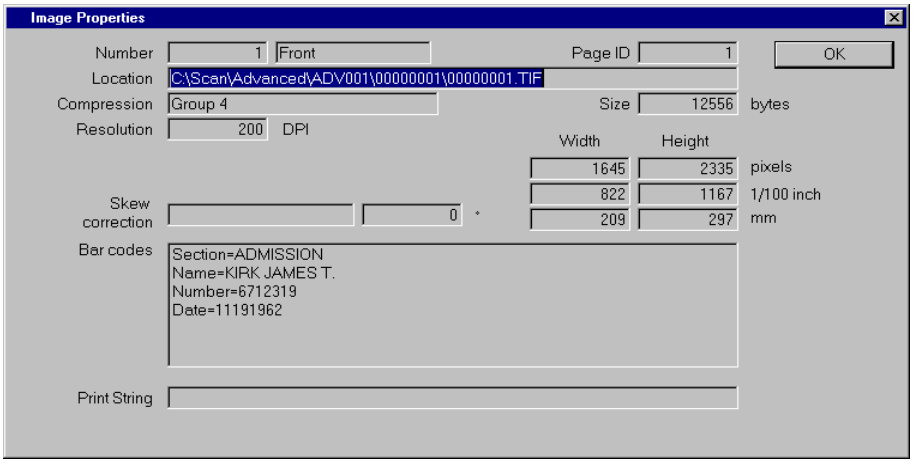
Image title bar

The Image title bar contains the current image number. The format of the image number (0 or 1 based) is defined in the **Application Setup>Images-Native Scan Structure**.

When you right-click on the Image Title bar, the context-sensitive menu with the option **Properties** appears.



Properties provides access to the following information for each image:



- Front or rear
- Page ID within the batch
- Location on disk
- Compression
- Resolution
- Image size in bytes, pixels by pixels, 1/100 inch x 1/100 inch, or in mm x mm
- Degrees of skew correction (when performed by the scanner or by Capture Software) applied to the image
- Skew Correction status

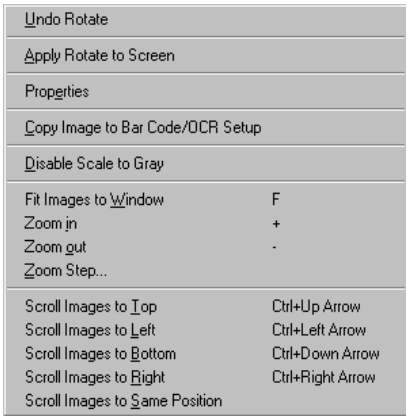
  NOTE: Skew correction is not reported for color images that have been deskewed by Capture Software.

- Print string when printing is enabled for your scanner.
- Image Address (i800 and i1800 Series Scanners only)
- Sequential Counter (i800 and i1800 Series Scanners only)
- Patch code type detected by the scanner (i800 and i1800 Series Scanners only)
- List of detected bar code or OCR text values (by launching the bar code/OCR engine when Properties is called). Only bar codes or OCR text zones defined through Bar Code/OCR Setup appear.

NOTE: Bar code detection and OCR are not available for *Kodak* Capture Software Lite.

Image context-sensitive menu

When you right-click on an image, a context-sensitive menu is displayed with the following options:


Undo Rotate
Apply Rotate to Screen
Properties
Copy Image to Bar Code/OCR Setup
Disable Scale to Gray
Fit Images to Window F
Zoom in +
Zoom out -
Zoom Step...
Scroll Images to Top Ctrl+Up Arrow
Scroll Images to Left Ctrl+Left Arrow
Scroll Images to Bottom Ctrl+Down Arrow
Scroll Images to Right Ctrl+Right Arrow
Scroll Images to Same Position

Undo [function] — this reverts one level of the last rotation, split tool action, and selection for insert, re-scan, delete, or flag. The menu option indicates the undo action it will perform (e.g., Undo Rotate, Undo Split, etc.).

Apply [function] to Screen — these menu options apply the selected tool on all the images on the screen at one time. This works with Rescan, Flag, Rotate, Blank, and Crop.

Properties — see the previous section, “Image title bar,” for an explanation of this function.

Copy Image to Bar Code/OCR Setup — makes the image available to Bar Code/OCR Setup for defining bar code field and OCR text zones. Refer to Chapter 6, *Bar Code/OCR Setup*, for more information.

NOTE: Bar code detection and OCR are not available for *Kodak* Capture Software Lite.

Enable/Disable Scale to Gray — toggles scale to gray on or off.

Fit Images to Window — this function is the same as described in “The View menu.” Keyboard shortcut: **F**

Zoom in — this function is the same as described in “The View menu.”

Zoom out — this function is the same as described in “The View menu.”

Zoom Step — this function is the same as described in “The View menu.”

Scroll Images to Top — scrolls the images in the Image Display to the top.

Scroll Images to Bottom — scrolls the images in the Image Display to the bottom.

Scroll Images to Left — scrolls the images in the Image Display to the left.

Scroll Images to Right — scrolls the images in the Image Display to the right.

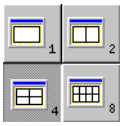
Scroll Images to Same Position — scroll the images in the Image Display to the same position as the image that was right-clicked.

Status bar

The Status bar indicates the size of the last scanned image or the image you clicked on last and the total Free Disk Space and Free Batch Space (based on the Maximum MB setting defined in the Storage setup). It also indicates the total number of images in the document and the number of documents in the batch.

Button bar

When selected, the Button bar appears on the left side of the screen. If the Button bar does not appear, enable **Button bar** from the Options menu.

Button	Description
	Process — processes the current batch.
	New Document — Capture Software starts a new document with a document number equal to the last document number +1. Selecting this button also enables the scanner and starts the scanner transport/feeder.
	Attachment — appends the next scanned page to the current document. This button only creates one attachment and has to be clicked again for each additional scanned page.
	Delete Document — deletes the current document. A confirmation box will be displayed when you click this button.
	First Document — goes directly to the first document in a batch.
	Last Document — goes directly to the last document in a batch.
	Previous Document — moves to the previous document number containing images.
	Next Document — moves to the next document number containing images.
	Image Navigation — moves respectively to the first, previous, next, and last image of a document.
	**Display Mode** — allows you to display 1, 2, 4, or 8 images simultaneously.

Button bar context-sensitive menu

If you position the mouse cursor on the Button bar and click the right-mouse button, a context-sensitive menu is displayed which allows you to display either large or small buttons.

4 Application Setup

Accessing the Application Setup

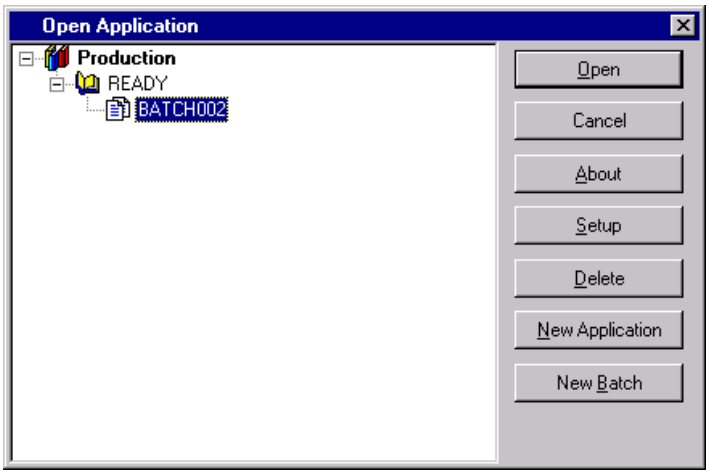
Capture Software provides two types of applications: Production applications and Template applications.

Production applications allow you to scan and create batches in a specific application.

Template applications are read-only applications that allow you to create a Production application based on the parameters used in the template. Template applications cannot be opened. They can only be set up. As a result, you cannot scan and create batches in Template applications. Capture Software provides a range of pre-defined Template applications.

To access Application Setup:

- Double-click on the Capture Software icon to open Capture Software. The Open Application dialog box appears.



The Open Application dialog box provides the following options:

NOTE: When you select **Open**, **Setup**, or **Delete**, the dialog box that appears will either be for an application or batch (depending on whether you have an application or batch highlighted).

Open — opens an existing application or batch.

Cancel — closes the Open Application dialog box.

About — accesses a Readme text file that describes the selected application.

Setup — accesses the Application Setup dialog box which allows you to set up the selected application. If a batch is highlighted, displays the Batch Setup dialog box.

Delete — deletes a selected application or batch. You cannot delete an application that contains batches.

New Application — accesses the Create New Application dialog box which allows you to set up a new application.

New Batch — accesses the Create New Batch dialog box which allows you to create a new batch for a selected application.

Opening and setting up applications

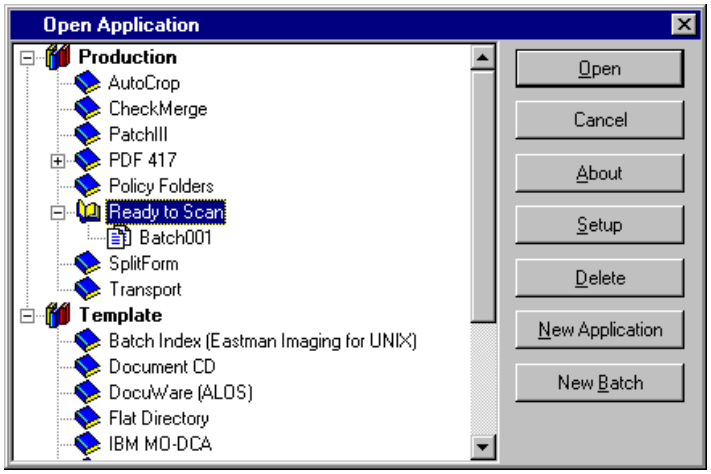
You must access the Open Application window before accessing Application Setup. Production and Template applications will be displayed only if the user profile provides access to both types of applications; otherwise, only Production applications will be displayed.

Application Setup allows you to define:

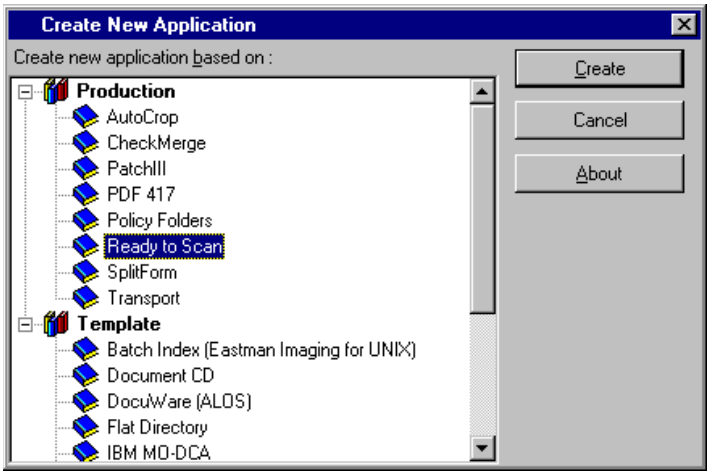
- The way images will be stored after scanning (Native Scan structure and separated at the batch, document and page level)
- User access levels
- Index fields at the batch, document and page level
- Batch Output Format for the application

To open and set up an application:

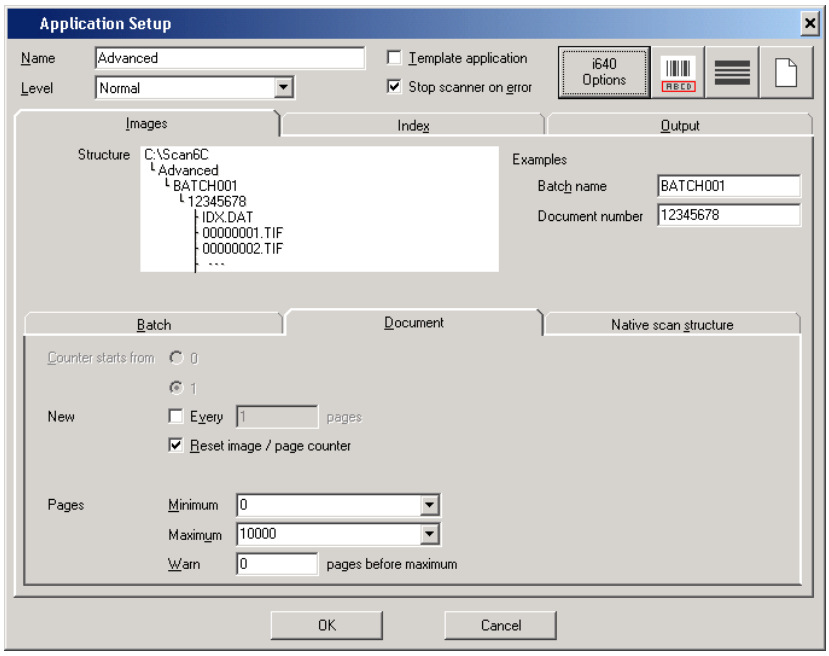
1. Select **File>Open Application** to show a list of available applications.



2. Select the application you want to set up and click **Setup** to access the Application Setup window, or click **New Application** to access the Create New Application dialog box to set up a new application.



3. Select the application on which you want to base your new application and select **Create**. The Application Setup window appears.



4. Enter an application name in the Name field. This application name can only be entered when creating a new application. You cannot modify the application name of an existing application.

NOTE: The last character of the application name must not end with a period (.).

5. Select a level from the drop-down list box to define the user access level for the application.The access levels are **Demo**, **Normal**, **Confidential**, or **Top Secret.**

   Only users who are defined for the selected level can open and access the application.

6. If you want this application set as a template, click the **Template application** box. If you check this box, scanning cannot be done in this application.

7. If you want to stop the feeder and paper transport on the scanner when an error is detected, click the **Stop Scanner on Error** box. If you do not check this box, a message will appear when an error is encountered, but the scanner will not stop.

Following are some errors that you may encounter:

- Index values that do not pass an audit (e.g., bar code missing or partial read)
- Batch names that do not pass an audit with automatic batch creation
- The page length is too short or too long
- Batch size warning level reached
- Disk space warning level reached
- Maximum number of documents in a batch is exceeded
- Maximum number of pages in a document is exceeded
- Minimum number of documents in a batch is not correct when a new batch is started
- Minimum number of pages in a document is not correct when a new document is started
- Batch name already exists with automatic batch creation

Button	Description
	Bar Code/OCR Setup* — defines bar codes or OCR text to be used for indexing and/or batch or document separation. See Chapter 6, *Bar Code/OCR Setup*, for more information.
	Patch Setup* — defines batch and document separation using patch codes. See Chapter 5, *Patch Setup*, for more information.
	Blank Page Setup — defines batch and document separation using blank pages. See Chapter 8, *Blank Page Setup*, for more information.
	<scanner model> Options — defines application settings that are specific to the attached scanner. See the section entitled “Scanner-specific settings” in this chapter.

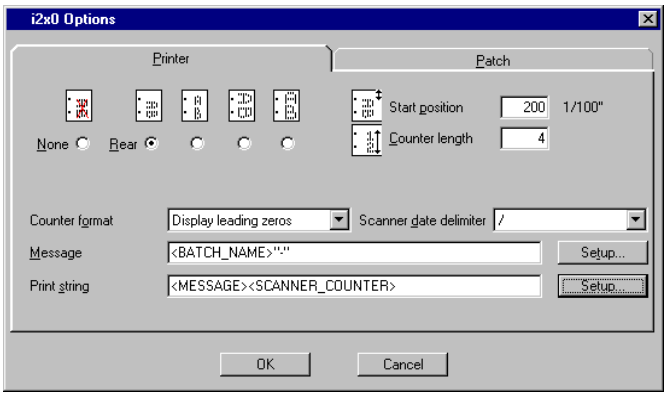
*Not available for *Kodak* Capture Software Lite.

Scanner-specific settings

For the i200, i600 and i800 Series Scanners the Application Setup window provides a button for scanner-specific settings at the application level. Each of these buttons is described in this section.

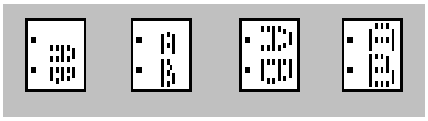
i200 and i600 Series Scanners options

To define scanner-specific options for the i200 and i600 Series Scanners, click on the i2x0/i6x0 Options button. Use the i2x0/6x0 dialog box to enable and define Document Printing when the Document Printer accessory is installed on your i200 Series Scanner. A Document Printer is standard on i600 Series Scanners. With the i280 Scanner and i600 Series Scanners, you can also enable and define Color Toggle Patch (also known as color-on-the-fly).



Printer tab for i200 Series Scanners

The i200 Series Scanners have an optional document printer accessory for the rear of each scanned page. Select **None** to disable printing. To enable printing, select one of the four font/orientation options:



Start Position — specifies how far down vertically on the page printing will begin. The start position is specified in units of 1/100 of an inch, and must begin at least 1/3 inch from the lead edge of the page. Allowable values are between 35 and 1665.

NOTE: If your i250/i260 Scanner has extended memory to allow the scanning of documents up to 26 inches in length, then the allowable values are between 35 and 2565. The allowable values for the i280 Scanner are between 35 and 3350.

The horizontal position across the page must be set on the document printer inside the scanner. You cannot specify the horizontal position within Capture Software.

Counter length — specifies how many digits of the counter you want to print when printing the scanner's sequential page counter. The counter is a 9-digit number and you can select to print anywhere from 1 to 9 digits. If the counter value inside the scanner will exceed the number of digits specified, then the counter value will roll over to a value of "1" and scanning will continue.

Counter format — specifies a format when printing the counter. Possible options are Display leading zeros (i.e., pad with zeros), Suppress leading zeros (i.e., pad with spaces), or Compress leading zeros (i.e., no padding).

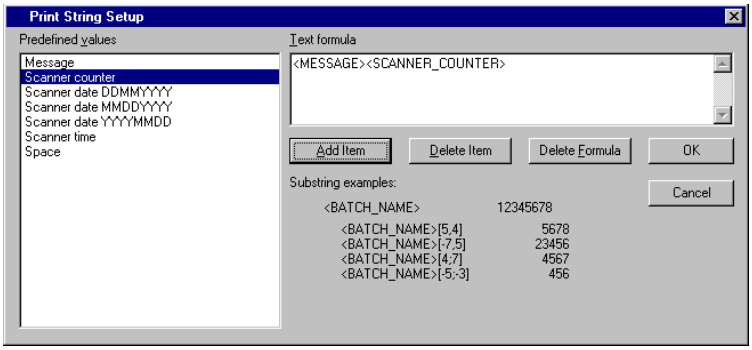
For example, if the counter value inside the scanner is 26 and the counter length is 4 and the counter format is Display leading zeros, then the counter printed on the scanned page will be **0026**.

NOTES: When a new batch is manually created and printing is enabled, you will be prompted to specify a starting value for the scanner's sequential page counter. By default, Capture Software suggests the next incremental value from when scanning was done last.

When batches are automatically created, the scanner counter value will automatically increase across batches.

Scanner date delimiter — allows you to specify the delimiter to be used in between the date fields when printing the scanner date. Possible values: no delimiter, forward slash (/), hyphen (-), period (.), space ( ).

Print string — when printing is enabled, you must specify the text or print string to be printed on each scanned page. Select **Setup** to access the Print String Setup dialog box to specify the data and build a print string formula based on pre-defined values.



The left side of the dialog box contains a list of pre-defined values you can use to build the print string formula. The print string can consist of one or more pre-defined values as specified in the formula.

To set up a Print String formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until your formula is complete.

NOTES: Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Print String formula.

For the Print String formula, you *cannot* use the special substring syntax that is available in other Formula dialog boxes. This is because all of the pre-defined values are scanner values and scanner values cannot be substringed.

Manually entered string values (enclosed in double quotes "") *cannot* be used for the Print String formula. Instead, the pre-defined **Message** field must be used to print fixed text as part of the Print String formula. Information about configuring the **Message** field is in the next section.

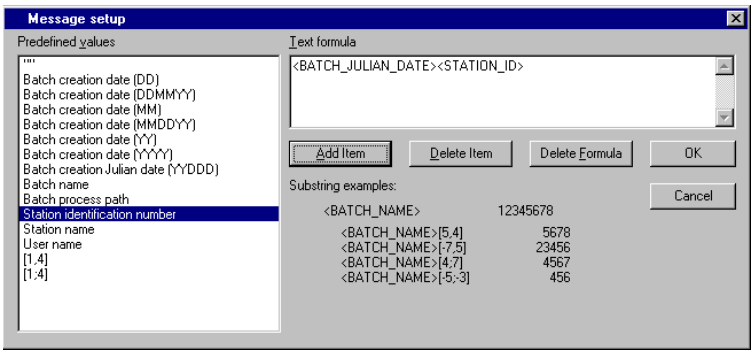
A maximum of 40 characters can be printed on a page. Therefore, the print string formula may not result in more than 40 characters of data.

During scanning, the printed text can be a combination of fixed text (i.e., will be the same for each scanned page) or variable values (i.e., value that may change with each scanned page). The **Message** field is fixed for each scanned page. The **Space** field can be used to separate pre-defined values if more than one is selected for the print string formula (you can also use spaces, or other typed delimiters, when defining the Message field to separate pre-defined values).

The following fields may be variable for each scanned page:

- **Scanner counter**. The printing format of the counter is specified in the i2x0 Options dialog box.
- **Scanner date**. The date format is selected from the Print String Setup dialog box. The date delimiter is specified in the i2x0 Options dialog box.
- **Scanner time**. The format is HH:MM in a 24-hour time format.

Message — when printing is enabled, the print string can contain fixed text that is printed on every scanned page. The Message field must be defined for specifying the fixed text. You can either type in the Message data (enclosed in double quotes “”) or select **Setup** to access the Message setup dialog box.



The left side of the dialog box contains a list of pre-defined values that you can use to build the Message formula. The message data can consist of one or more pre-defined values as specified in the formula. A maximum of 40 characters is allowed.

To set up a Message formula:

1. Select a pre-defined value from the list box.
2. Click **Add item**.
3. Repeat steps 1 and 2 until your formula is complete.

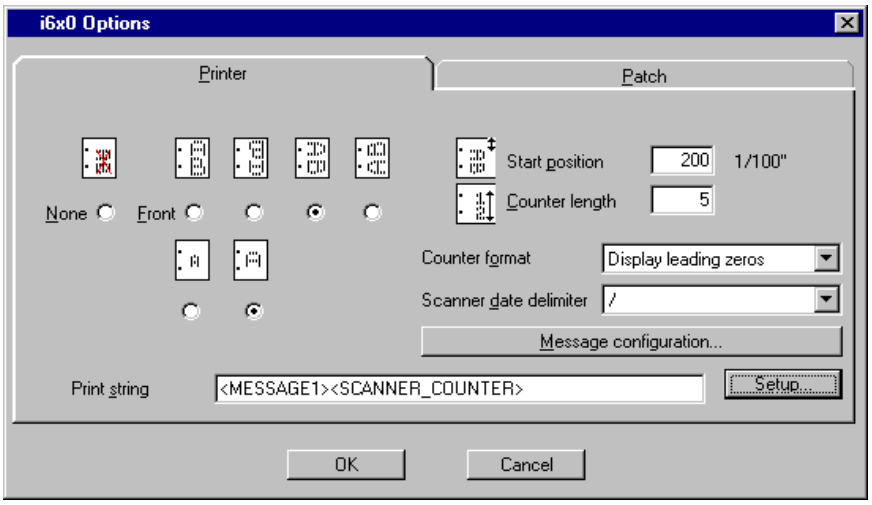
NOTES: Select **Delete item** to delete the last pre-defined value that was added. **Delete formula** deletes the entire Message formula.

You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a pre-defined value (e.g., [1,4]). Refer to the “Index setup tab” section later in this chapter for the substring syntax for formula and examples.

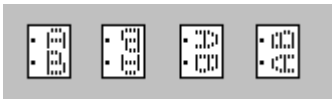
You can also combine pre-defined values with a manually entered string value (enclosed in quotes “”) to build a formula.

Printer tab for i600 Series Scanners

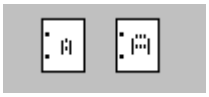
The Printer tab allows you to define what gets printed on each scanned page, where printing will occur, and the format in which printing will be done.



The i600 Series Scanners include a build-in document printer for the front of each scanned page. Select **None** to disable printing. To enable printing, select one of the four orientation options:



Then select one of the two font size options:



Start Position — specifies how far down vertically on the page printing will begin. The start position is specified in units of 1/100 of an inch. The start position must begin at least 1/3 inch from the lead edge of the page. Allowable values are between 35 and 3350.

The horizontal position across the page must be set on the document printer unit inside the scanner. You cannot specify the horizontal position within Capture Software.

Counter length — specifies how many digits of the counter you want to print when printing the scanner's sequential page counter. The counter is a 9-digit number and you can select to print anywhere from 1 to 9 digits. If the counter value inside the scanner is greater than the number of digits specified, then the counter value will roll over to a value of "1" and scanning will continue.

Counter format — specifies a format when printing the counter. Possible options are Display leading zeros (i.e., pad with zeros), Suppress leading zeros (i.e., pad with spaces), or Compress leading zeros (i.e., no padding).

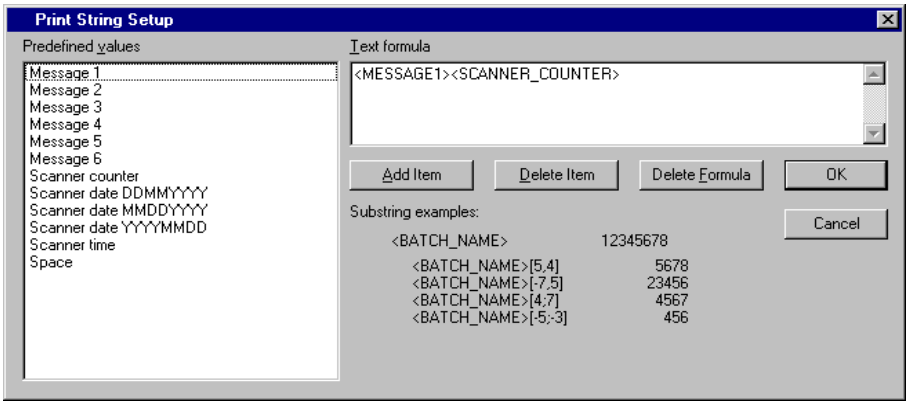
For example, if the counter value inside the scanner is 26 and the counter length is 4 and the counter format is Display leading zeros, then the counter printed on the scanned page will be **0026**.

NOTES: When a new batch is manually created and printing is enabled, you will be prompted to specify a starting value for the scanner's sequential page counter. By default, Capture Software suggests the next incremental value from when scanning was done last.

When batches are automatically created, the scanner counter value will automatically increase across batches.

Scanner date delimiter — specifies the delimiter to be used in between the date fields. Possible values: no delimiter, forward slash (/), hyphen (-), period (.), and a space ().

Print string — when printing is enabled, you must specify the text or print string to be printed on each scanned page. Click **Setup** to access the Print String Setup dialog box to specify the data and build a print string formula based on pre-defined values.



The left side of the dialog box contains a list of pre-defined values you can use to build a print string formula. The print string can consist of one or more pre-defined values as specified in the formula.

To set up a Print String formula:

1. Select a pre-defined value from the list box.
2. Click **Add item**.
3. Repeat steps 1 and 2 until your formula is complete.

NOTES: Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Print String formula.

For the Printing String formula, you *cannot* use the special substring syntax that is available in other Formula dialog boxes. This is because all of the pre-defined values are scanner values and scanner values cannot be substringed.

Manually entered string values (enclosed in double quotes "") *cannot* be used for the Print String formula. Instead, the pre-defined **Message** fields must be used to print fixed text as part of the Print String formula. Information about Message configuration is in the next section.

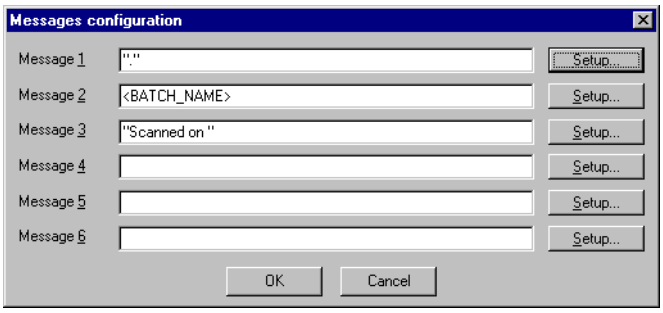
A maximum of 40 characters can be printed on a page. Therefore, the print string formula may not result in more than 40 characters of data.

During scanning, the printed text can be a combination of fixed text (i.e., will be the same for each scanned page) or variable values (i.e., value that may change with each scanned page). The Message fields (**Message 1,...Message 6**) are fixed for each scanned page. The **Space** field can be used to separate pre-defined values if more than one is selected for the print string formula (you can also use spaces, or other typed in delimiters, when defining the Message field to separate pre-defined values).

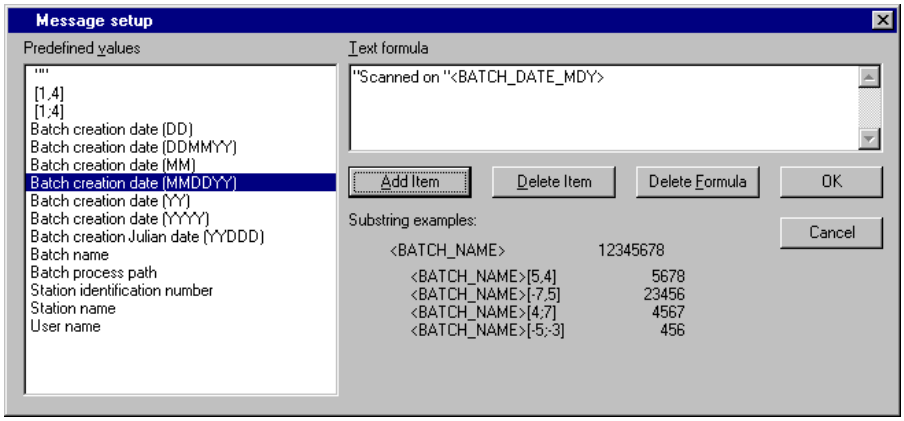
The following fields may be variable for each scanned page:

- **Scanner counter**. The printing format of the counter is specified in the main dialog box of the Printer tab.
- **Scanner date**. The date format is selected from the Print String Setup dialog box. The date delimiter is specified in the main dialog box of the Printer tab.
- **Scanner time.** The format is HH:MM in a 24-hour time format.

Message configuration — click on this button to define up to six message fields that are used to make up the print strings for each image level for which printing is enabled.



Specify the fixed message data to be printed in the Text box. You can either type in the message data (enclosed in quotes “”) or select **Setup** to access the Message Setup dialog box.



The left side of the dialog box contains a list of pre-defined values that you can use to build the Message formula. The message data can consist of one or more pre-defined values as specified in the formula. A maximum of 20 characters is allowed per message field.

To set up a Message formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until your formula is complete.

NOTES: Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Message formula.

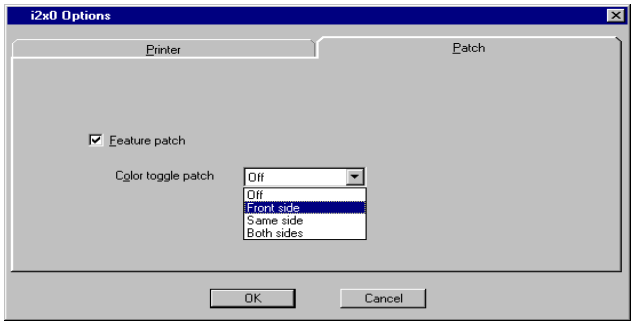
You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a pre-defined value (e.g., [1,4]). Refer to the “Index setup tab” section later in this chapter for the substring syntax for formula and examples.

You can also combine pre-defined values with a manually entered string value to build a formula.

Patch tab

The i280 Scanner and i600 Series Scanners can switch back and forth between bi-tonal and color scanning (i.e., Color-on-the-fly) through the use of a Color toggle patch.

Check the **Feature Patch** option to enable feature patch documents to be read by the scanner. When enabled, you must also specify a **Color toggle patch** option:



Off — disables Color toggle patch.

Front Side — enables Color on-the-fly for only the front images of scanned pages.

Same Side — enables Color on-the-fly for only the side of the scanned page that corresponds to the side of the page that contains the Color toggle patch.

Both Sides — enables Color on-the-fly for both the front and rear images of scanned pages.

See the following section “Color-on-the-fly using the Toggle patch”, for more information about how to configure Capture Software for Color-on-the-fly processing.

Color on-the-fly using the Toggle patch

When Toggle patch is enabled, color on-the-fly processing is also enabled. With Color on-the-fly, scanning automatically switches between color and bi-tonal whenever a Toggle patch is read by the scanner.

To configure Color on-the-fly processing:

1. Check **Feature patch** to enable Feature patch code reading.
2. Enable **Color Toggle patch** by selecting Front Side, Same Side or Both Sides on the drop-down list.
3. Select a page setup that is configured for either bi-tonal-only or color-only scanning.

IMPORTANT: If you select a page setup with simultaneous color and bi-tonal scanning, Color toggle patches will be ignored and Color on-the-fly processing will not occur.

When configuring the page setup that will be used for scanning, first enable both the bi-tonal and color check boxes and set all bi-tonal and color settings to the desired values. Then, before you save the page setup, disable either the bi-tonal or the color check box, depending on how you want scanning to start.

Scanning will start as either bi-tonal or color, depending on the image type enabled in the page setup. When a Color toggle patch page is encountered, scanning will automatically switch to the other image type and the Color toggle patch page will be discarded.

NOTES: If the Color toggle patch page setting is Front Side, then only front side scanning will switch from bi-tonal to color or color to bi-tonal. All rear images will be of the image type selected in the page setup.

If the Color toggle patch page setting is Same Side, then scanning switches only image types for the side of the page that contains the Color toggle patch. If the Color toggle patch was on the Front Side, then only the front image will switch. If the Color toggle patch was on the Rear Side, then only rear images will switch.

If the Color toggle patch page setting is Both Sides, then both the front and rear images will switch image types when a Color Toggle patch is read.

When the i280 Scanner or i600 Series Scanner is stopped and restarted within Capture Software, scanning will restart in the image type (bi-tonal or color) specified in the page setup. For example, if you encounter a jam while the Color toggle patch mode is in color and you restart the scanner with a bi-tonal page setup, scanning will restart in bi-tonal.

i800 Series Scanners Options

To define scanner-specific options for the i800 Series Scanners, click the i8xx Options button. You can configure Image Address, Printing, Batching, and Patch Code recognition in the scanner.

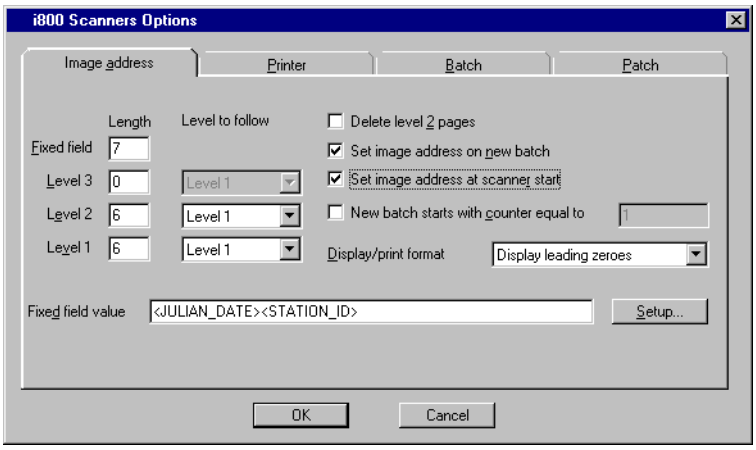


Image Address tab

The Image Address tab allows you to define the image address format used during scanning and other related image address options within Capture Software. There are four image address fields that make up the image address format:

- **Fixed Field** — a static field containing ASCII text that does not increment or change during scanning.
- **Level 3** — a counter that is associated with the numeric portion of the batch name within Capture Software. Whenever a Level 3 page is scanned, Capture Software will automatically create a new batch and discard the Level 3 page.
- **Level 2** — a counter that is associated with the document number of the current batch in Capture Software. Whenever a Level 2 page is scanned, Capture Software will automatically create a new document.
- **Level 1** — a counter that is associated with the page number of the current document in Capture Software. Whenever a Level 1 page is scanned, Capture Software will attach the images for the page to the current document.

Length — allows you to specify the length of each image address field. The maximum length for each image address field is 9. The combined length of all image address fields cannot exceed 27 characters. This results in a maximum image address length of 30 characters (with a period (.) delimiter between each field). Enter a value of 0 to disable an image address field. The default setting of all image fields lengths set to 0 will disable image addressing in the scanner.

NOTES: For a Level 2 Offset image address format, specify a Level 2 length and set the Level 1 length to 0.

For a Level 3 Offset image address format, specify a Level 3 and Level 2 length and set the Level 1 length to 0.

Level 2 and Level 3 Offset image address formats are not recommended. While the Offset image address formats (popular with legacy Kodak High Volume scanners and HVCS customers) are still supported with the i800 Series scanners, they do behave differently from existing High Volume scanners (e.g., Scanner 9520):

- Level 1 value is not maintained or contained in the image header data.
- Every time the scanner is started/enabled with an Offset image address format, the scanner image address will be at Level 2. Unless the scanner operator changes the image address to Level 1 via the operator control panel, the next scanned page will be a Level 2 page which will cause a new document to be created in Capture Software. This will result in the Capture Software document number and the scanner image address to be out of sync.
- Because the scanner printing functionality allows individual image address fields to be printed and because the image address format has been extended from 12 characters to 27 characters, the need for Offset image addresses becomes unnecessary.

Level to follow — for each image address level, specify the image level that will be assigned to the next scanned page. Possible values are Level 1, Level 2, and Level 3. Level 1 is the default setting for all Level to follow rules. If a Level 2 and/or Level 3 image address field is not defined, then a Level to follow rule may not be specified. A Level to follow Level 1, however, may always be specified.

Example

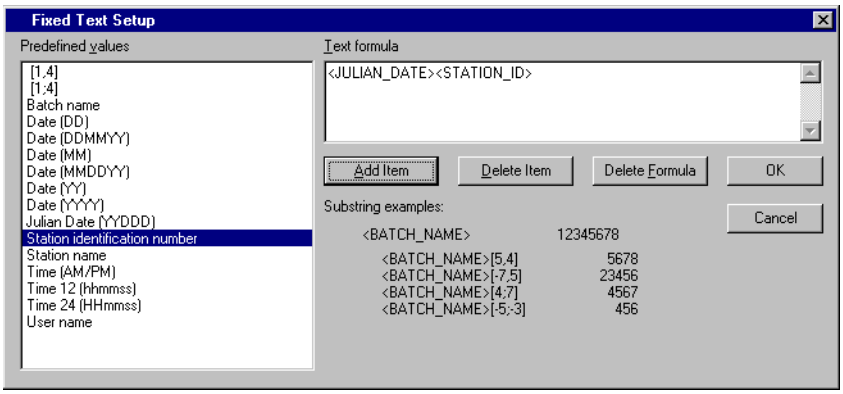
For health claim processing, every page scanned (the claim form) is its own document. There is, however, the occasional claim form that will be accompanied by some form of correspondence or supporting documentation. For this application, you would define a Level 2 image address with the following Level to follow rules:

Level 2 followed by Level 2

Level 1 followed by Level 1

This will effectively create a new document in Capture Software for every page scanned. When the exception claim form needs to be scanned, the scanner operator presses the Level key on the scanner control panel to set the image address level to Level 1 after scanning the claim form. Then the correspondence pages are scanned. Once complete, the Level key is pressed again to set the image address level back to Level 2 for regular scanning.

Fixed field value — specifies the default value for the Fixed field portion of the image address. You can either type in the Fixed field value (enclosed in double quotes “”) or select **Setup** to access the Fixed Field Setup dialog box.



The left side of the dialog box contains a list of pre-defined values that you can use to build the Fixed Field formula. The Fixed field value can consist of one or more pre-defined values as specified in the formula. The total number of characters in the formula cannot exceed the defined length for the Fixed field.

To set up a Fixed field formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until the formula is complete.

NOTES: Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Fixed field formula.

You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a pre-defined value (e.g., [1,4]). Refer to the “Index setup tab” section later in this chapter for the substring syntax for formula and examples.

You can also combine pre-defined values with a manually entered string value to build a formula.

Delete level 2 pages — automatically deletes Level 2 pages that have been scanned. This option is useful when a Level 2 Patch page is being used as a document separator.

Set image address on new batch — sets the image address value when a new batch is manually created in Capture Software. This option does not affect the image address when batches are automatically created in Capture Software (e.g., blank page separation, bar code separation). By default, the image address default value for a new batch will be as follows:

- **Fixed field** — the default value as defined in this dialog box.
- **Level 3** — the batch number portion of the Capture Software batch name (e.g., a value of 19 if the batch name is Batch019).
- **Level 2** — Capture Software document number for the first document in the batch.
- **Level 1** — 0 if the image address format is Level 2 or Level 3. 1 if the image address format is Level 1.

In addition, with sufficient privileges, the user will have the opportunity to override the default image address value when the batch is created.

Set image address at scanner start — automatically resynchronizes the scanner image address with the current scan batch in Capture Software every time the scanner is started. The image address value is set to what the image address should be for the next scanned page. This option is only available when Set image address on new batch is enabled. When the scanner image address is resynchronized, the image address fields will be set to the following:

- **Fixed field** — will not change from the current scanner value.
- **Level 3** — the batch number portion of the Capture Software batch name.
- **Level 2** — the current Capture Software document number.
- **Level 1** — the number of pages in the current document if the image address format is Level 2 or Level 3. Number of pages in the current document + 1 if the image address format is Level 1.

NOTES: When simultaneous scanning, Set image address at scanner start is not recommended. This is because the number of pages in the current document is not correctly maintained by Capture Software when simultaneous scanning. As a result, the Level 1 portion of the image address can easily get out of sync.

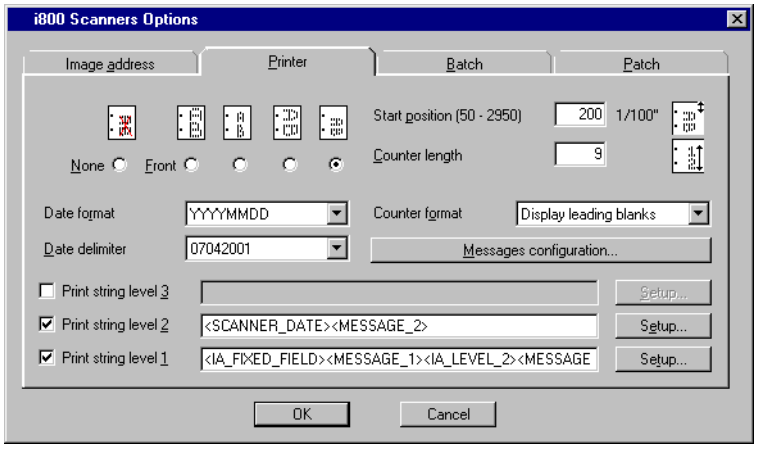
When Set image address at scanner start is enabled, the Set Image Address option in the Scanner Menu becomes ineffective. This is because any change in the image address made by Set Image Address will be overridden once the scanner is restarted.

New batch starts with counter equal to — sets the Sequential Counter inside the scanner whenever a batch is manually created in Capture Software. This option does not affect the Sequential Counter when batches are automatically created in Capture Software (e.g., blank page separation, bar code separation). When enabled, specify the starting value.

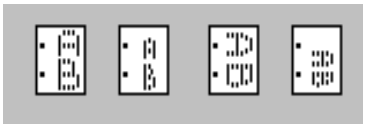
Display/print format — specifies the format of the image address fields whenever the image address is displayed on the scanner operator control panel or printed on a scanned page. Possible options are Display leading zeroes (i.e., pad with zeroes), Display leading blanks (i.e., pad with spaces), or No padding.

Printer tab

The Printer tab allows you to define what gets printed on each scanned page, where printing will occur, and the format in which printing will be done.



The i800 Series Scanners include a built-in document printer for the front of each scanned page. Select **None** to disable printing. To enable printing, select one of the four font/orientation options:



Start position — specifies how far down vertically on the page printing will begin. The start position is specified in units of 1/100 of an inch. The start position must begin at least ½" from the lead edge of the page. Allowable values are between 50 (1/2") and 2950.

The horizontal position across the page must be set on the document printer unit inside the scanner. You cannot specify the horizontal position within Capture Software.

Counter length — specifies how many digits of the counter you want to print when printing the scanner's sequential page counter. The counter is a 9-digit number and you can select to print anywhere from 1 to 9 digits. If the counter value inside the scanner is greater than the number of digits specified, then the scanner will report a "Sequential Counter Overflow" error and scanning will be stopped.

Counter format — specifies a format when printing the counter. Possible options are Display leading zeroes (i.e., pad with zeroes), Display leading blanks (i.e., pad with spaces), or No padding.

For example, if the counter value inside the scanner is 26 and the counter length is 4 and the counter format is Display leading zeroes, then the counter printed on the scanned page will be **0026**.

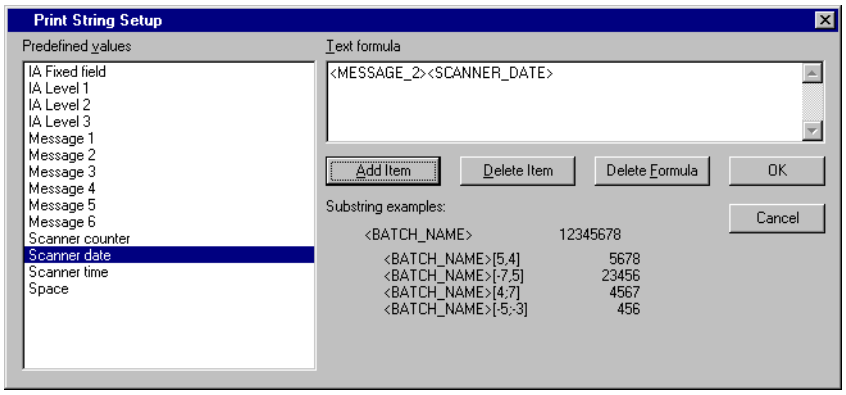
Date format — specifies the date format to be used. Possible values are MMDDYYYY, DDMMYYYY, and YYYYMMDD.

Date delimiter — specifies the delimiter to be used in between the date fields. Possible values are: no delimiter, forward slash "/", hyphen "-", period ".", and a space.

Print String — when printing is enabled, you must specify the text or print string to be printed on each scanned page. With the i800 Series scanners, you can specify a different print string for each image level (i.e., Level 3, Level 2, Level 1). In addition, you can elect to enable/disable printing at each image level.

For example, if you only wanted to print on the lead page of each document, you would check the box **Print string level 2**, but disable (uncheck) Print string level 3 and Print string level 1.

Click on the Setup button to access the Print String Setup dialog box where you can specify the data and build a print string formula based on pre-defined values.



The left side of the dialog box contains a list of pre-defined values that you can use to build the print string formula. The print string can consist of one or more pre-defined values as specified in the formula.

To set up a Print String formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until your formula is complete.

NOTES: Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Print String formula.

For the Print String formula, you *cannot* use the special substring syntax that is available in other Formula dialog boxes. This is because all of the pre-defined values are scanner values and scanner values cannot be substringed.

Manually entered string values (enclosed in double quotes “”) *cannot* be used for the Print String formula. Instead, the pre-defined **Message** fields must be used to print fixed text as part of the Print String formula. Information about Message configuration is on the following page.

A maximum of 40 characters can be printed on a page. Therefore, the print string formula may not result in more than 40 characters of data.

During scanning, the printed text can be a combination of fixed text (i.e., will be the same for each scanned page) or variable values (i.e., values that may change with each scanned page). The Message fields (**Message 1**,…**Message 6**) are fixed for each scanned page. The **Space** field can be used to separate pre-defined values if more than one is selected for the print string formula (you can also use spaces, or other typed in delimiters, when defining the Message fields to separate pre-defined values).

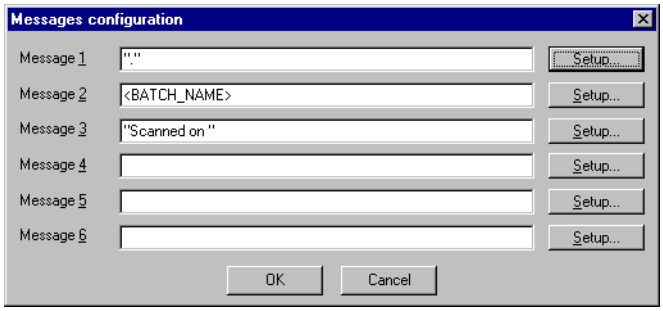
The following fields may be variable for each scanned page:

- **IA Fixed field, IA Level 3, IA Level 2, IA Level 1** make up the scanner image address. The printing format of image address fields is specified in the Image Address tab of the i800 Options dialog box. If you want to print a delimited image address, define a Message field that contains the delimiter. For example, if you have a Level 3 image address format and you wish to print the entire image address delimited with a period (“.”), define the Message 1 field with a pre-defined value of “.” and then define the Print String to be the following:

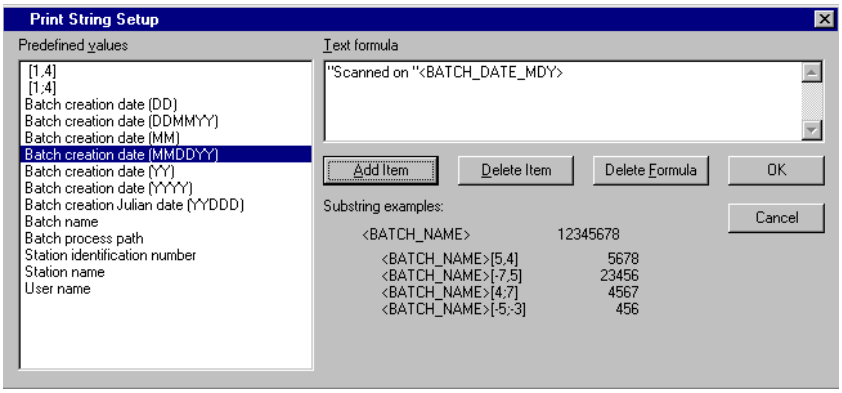
  <IA_FIXED_FIELD><MESSAGE_1><IA_LEVEL_3><MESSAGE_1><IA_LEVEL_2><MESSAGE_1><IA_LEVEL_1>

- **Scanner counter and Scanner date**. The printing format of the counter and date are specified in the main dialog box of the Printer tab.
- **Scanner time**. The format is HH:MM in a 24-hour time format.

Messages configuration — click on this button to define up to six message fields that are used to make up the print strings for each image level for which printing is enabled.



Specify the fixed message data to be printed in the Text box. You can either type in the message data (enclosed in double quotes “”) or you can press the Setup button to access the Print String Setup dialog box for messages.



The left side of the dialog box contains a list of pre-defined values that you can use to build the Message formula. The message data can consist of one or more pre-defined values as specified in the formula. A maximum of 20 characters is allowed per message field.

To set up a Message formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until your formula is complete.

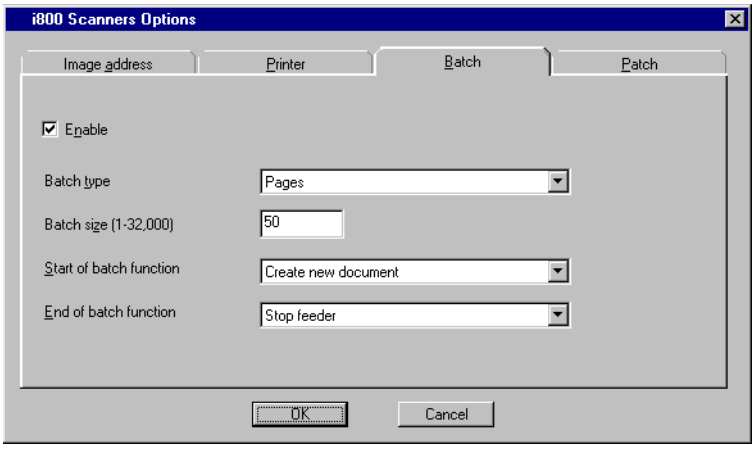
NOTES: Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Message formula.

You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a pre-defined value (e.g., [1,4]). Refer to the “Index setup tab” section later in this chapter for the substring syntax for formula and examples.

You can also combine pre-defined values with a manually entered string value to build a formula.

Batch tab

The Batch tab allows you to define the batching function that is available in the i800 Series Scanners.



Click on the **Enable** check box to enable scanner batching. When enabled the scanner counts, a specified number of either Level 1, Level 2, or Level 3 pages. In Capture Software, Level 1 pages are referred to as Pages, Level 2 pages are referred to as Documents, and Level 3 pages are referred to as Batches. When the specified number has been reached, the scanner performs an End of batch function. Then counting starts again after the scanner performs a Start of batch function.

NOTES: Scanner batching does not actually start until the scanner is enabled within Capture Software and the scanner feeder and transport are started.

Because scanner batching is based on page levels, it really only makes sense when image addressing is also defined in scanner.

Batch type — select the type of batching that is to be performed:

- **Pages** or Level 1 pages scanned.
- **Documents** or Level 2 pages scanned.
- **Batches** or Level 3 pages scanned.

Batch size — specifies the number of the Batch type that will be counted by the scanner to determine the end of a batch. A number from 1 to 32,000 is allowed. When the scanner is enabled, the Batch size number is displayed on the scanner operator control panel to indicate that batching is enabled.

Start of batch function — specifies the action the scanner will take when a new batch is started.

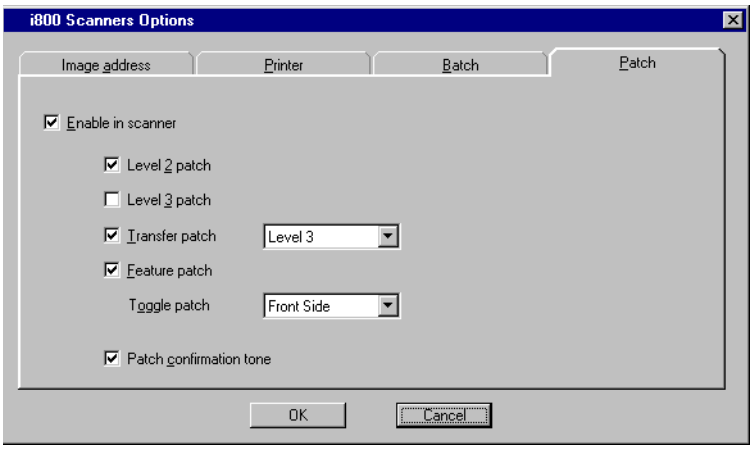
- **Attach to current document** — the scanner image address level is set to Level 1. The next page scanned will be attached to the current Capture Software document.
- **Create new document** — the scanner image address level is set to Level 2. The next page scanned will create a new document within Capture Software.
- **Create new batch** — the scanner image address is set to Level 3. The next page scanned will create a new batch within Capture Software.

End of batch function — specifies the action the scanner will take when a batch has been completed.

- **Stop feeder** — the scanner feeder is stopped but the scanner remains enabled. To resume scanning, press the Green button on the scanner operator control panel.
- **Stop feeder and transport** — the scanner feeder and transport are stopped and the scanner is disabled. Scanning must be resumed from within Capture Software.
- **Continue scanning and start a new batch** — the scanner continues to run and the Start of batch function is automatically performed.

Patch tab

The Patch tab allows you to enable/disable patch code reading in the scanner for all of the patch code types supported by the scanner. When patch code reading is enabled in the scanner, software patch code reading in Capture Software is not allowed. Conversely, when software patch code reading is enabled in Capture Software, hardware patch code reading in the scanner may not be defined.



Click on the **Enable in scanner** check box to define hardware patch code reading.

Level 2 patch — check this option to enable Level 2 patch codes to be read by the scanner. When a Level 2 patch code is read, the scanner image address level switches to Level 2 and a new document will be created in Capture Software.

Level 3 patch — check this option to enable Level 3 patch codes to be read by the scanner. When a Level 3 patch code is read, the scanner image address level switches to Level 3 and a new batch will be created in Capture Software.

Transfer patch — check this option to enable Transfer patches to be read by the scanner. When enabled you must specify what the image address level (either Level 3 or Level 2) of the next scanned page will be after the Transfer patch. Capture Software will discard all Transfer patch pages.

Feature patch — check this option to enable all Feature patch documents to be read by the scanner. When checked, Level 1, Level 4, and Level 6 feature patches are enabled for reading. The Level 4 feature patch may also be used as a Toggle patch to enable the color on-the-fly functionality (i.e., switching back and forth between bi-tonal and color scanning) of the i800 Series Scanners. When Feature patch code reading is enabled, you must also specify a **Toggle patch** option:

- **Off** — disable color on-the-fly.
- **Front Side** — enable color on-the-fly for only the front images of scanned pages.
- **Both Sides** — enable color on-the-fly for both the front and rear images of scanned pages.

Patch confirmation tone — check this option to enable the scanner to produce a “beep” each time a patch code is read on a scanned page.

See the following section, “Color on-the-fly using the Toggle patch,” for more information about how to configure Capture Software for color on-the-fly processing.

NOTE: When a Feature patch page is detected, except when Toggle patch is enabled, it will be attached to the current Capture Software document.

Color on-the-fly using the Toggle patch

When Toggle patch is enabled, color on-the-fly processing is also enabled. With color on-the-fly, scanning automatically switches between color and bi-tonal whenever a Toggle patch is read by the scanner.

To configure color on-the-fly processing:

1. Check **Feature patch** to enable Feature patch code reading.
2. Enable **Toggle patch** by selecting Front Side or Both Sides on the drop-down list.
3. Select a page setup that is configured for either bi-tonal-only or color-only scanning.

IMPORTANT: If you select a page setup with simultaneous color and bi-tonal scanning, Toggle patches will be ignored and color on-the-fly processing will not occur.

When configuring the page setup that will be used for scanning, first enable both the bi-tonal and color check boxes and set all bi-tonal and color settings to the desired values. Then, before you save the page setup, disable either the bi-tonal or the color check box, depending on how you want scanning to start.

Scanning will start as either bi-tonal or color, depending on the image type enabled in the page setup. When a Toggle patch page is encountered, scanning will automatically switch to the other image type and the Toggle patch page will be discarded.

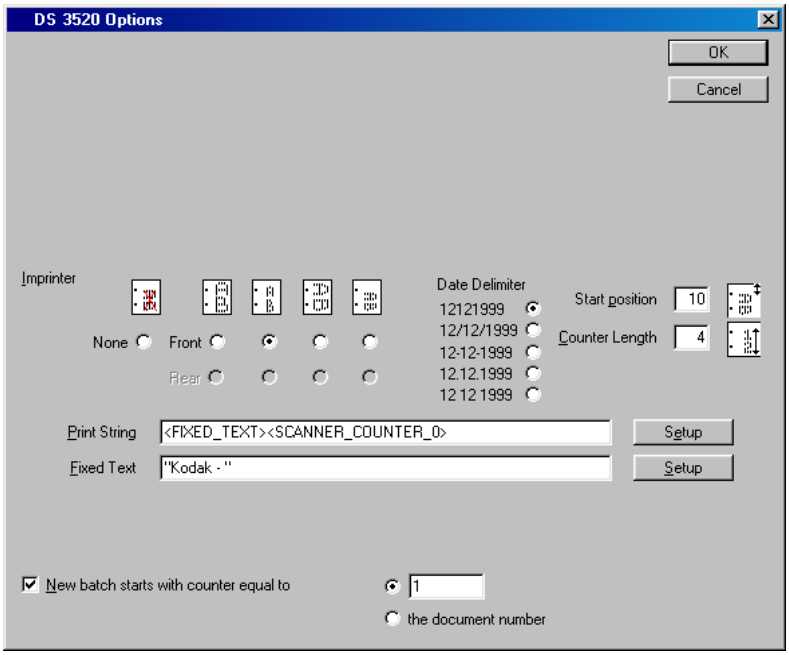
NOTES: If the Toggle patch page setting is Front Side, then only front side scanning will switch from bi-tonal to color or color to bi-tonal. All rear images will be of the image type selected in the page setup.

If the Toggle patch page setting is Both Sides, then both the front and rear images will switch image types when a Toggle patch is read.

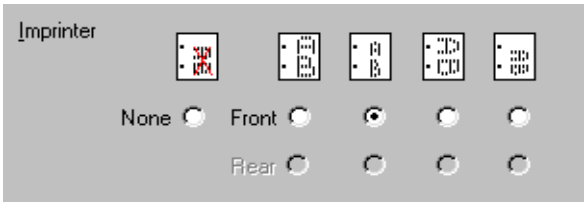
When the i800 Series Scanner is stopped and restarted within Capture Software, scanning will restart in the image type (bi-tonal or color) specified in the page setup. For example, if you encounter a jam while the Toggle patch mode is in color and you restart the scanner with a bi-tonal page setup, scanning will restart in bi-tonal.

3520 and 4500 Scanner options

If you 3520 or 4500 Scanner has the document printer installed, you can configure printing by clicking on the DS XXXX Options button on the Application Setup dialog box..



You can enable document printing for the front of each scanned page. Select **None** to disable printing. To enable printing, select one of the four font/ orientation options:

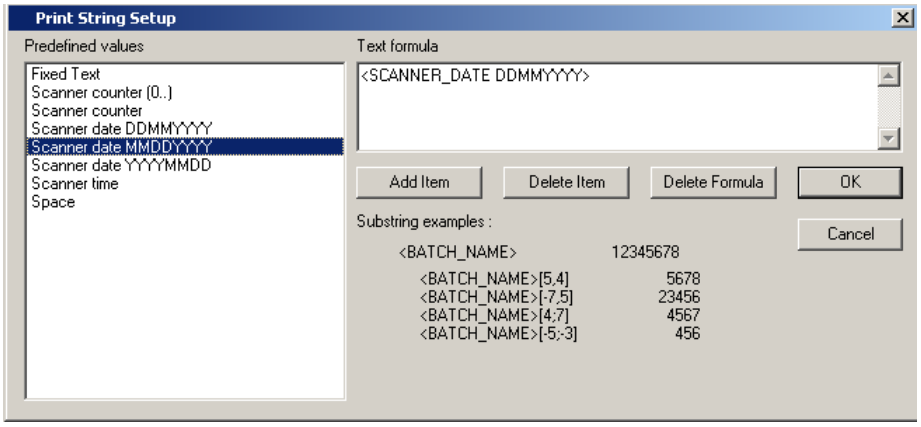


Date Delimiter — allows you to specify the delimiter to be used in between the date fields when printing the scanner date. Possible values: no delimiter, forward slash (/), hyphen (-), period (.), space ( ).

Start position — specifies how far down vertically on the page printing will begin. The start position is specified in units of 3.4 mm. Printing cannot be done on the first or last 10 mm (approximately 1/3 of an inch) of a scanned page. Therefore, a start position of “0” causes printing to begin 10 mm down from the top of the paper. Furthermore, a start position of 10 (34 mm) causes imprinting to begin 44 mm (approximately 1.6 inches) from the leading edge of the page. The horizontal position across the page must be set on the document printer unit inside the scanner. You cannot specify the horizontal position within Capture Software.

Counter Length — specifies how many digits of the counter you want to print when printing the scanner’s sequential page counter. The counter is a 9-digit number and you can select to print anywhere from 1 to 9 digits. If the counter value inside the scanner will exceed the number of digits specified, then the counter value will roll over to a value of “1” and scanning will continue.

Print String — when printing is enabled, you must specify the text or print string to be printed on each scanned page. Select Setup to access the Print String Setup dialog box to specify the data and build a print string formula based on pre-defined values.



The left side of the dialog box contains a list of pre-defined values you can use to build the print string formula. The print string can consist of one or more pre-defined values as specified in the formula.

To set up a Print String formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until your formula is complete.

NOTES:

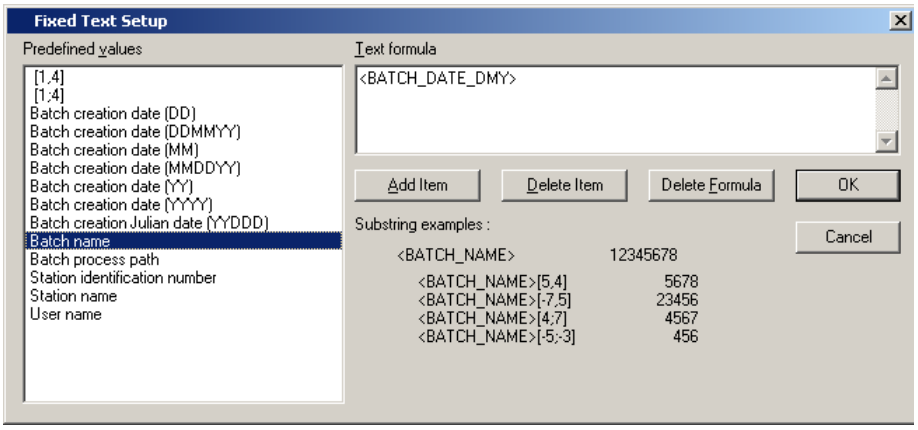
- Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Print String formula.
- For the Print String formula, you cannot use the special substring syntax that is available in other Formula dialog boxes. This is because all of the pre-defined values are scanner values and scanner values *cannot* be substringed.
- Manually entered string values (enclosed in double quotes “”) *cannot* be used for the Print String formula.
- A maximum of 40 characters can be printed on a page. Therefore, the print string formula may not result in more than 40 characters of data.

During scanning, the printed text can be a combination of fixed text (i.e., will be the same for each scanned page) or variable values (i.e., value that may change with each scanned page). The Space field can be used to separate pre-defined values if more than one is selected for the print string formula (you can also use spaces, or other typed delimiters, when defining the Fixed Text field to separate pre-defined values).

The following fields may be variable for each scanned page:

- **Scanner counter:** the printing format of the counter is specified in the 3520/4500 Options dialog box.
- **Scanner date:** the date format is selected from the Print String Setup dialog box. The date delimiter is specified in the 3520/4500 Options dialog box.
- **Scanner time**: the format is HH:MM in a 24-hour time format.

Fixed Text — when printing is enabled, the print string can contain fixed text that is printed on every scanned page. You can either type the Fixed field value (enclosed in double quotes “”) or select **Setup** to access the Fixed Field Setup dialog box.



The left side of the dialog box contains a list of pre-defined values you can use to build the fixed text formula. The fixed text can consist of one or more pre-defined values as specified in the formula.

To set up a Fixed Text formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item**.
3. Repeat steps 1 and 2 until your formula is complete.

NOTES:

- Select **Delete Item** to delete the last pre-defined value that was added. **Delete Formula** deletes the entire Fixed Text formula.
- You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a pre-defined value (e.g., [1,4]). Refer to the “Index Setup tab” section later in this chapter for the substring syntax for formula and examples.
- You can also combine pre-defined values with a manually entered string value to build a formula.

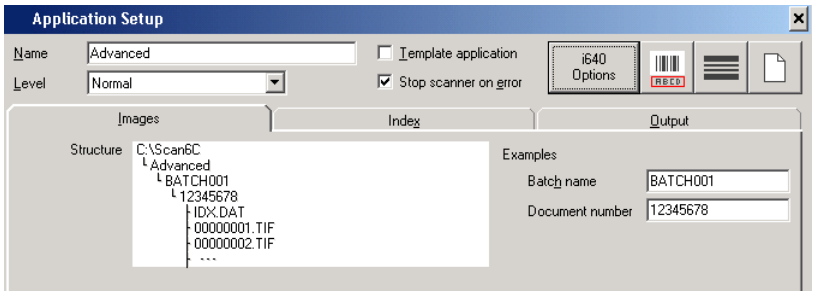
New batch starts with counter equal to — allows you to specify whether you want the scanner counter to start as a specified value (default of 1) or the Capture Software document number whenever a new batch is **manually created** in Capture Software.

Application Setup tabs

The Application Setup window provides Images, Index, and Output tabs. The Images and Index tabs also have sub-tabs. How to use each of these tabs is described in this chapter.

Images setup tab

The Images tab provides a graphical representation of your scan structure and is updated each time a modification is made in the Batch, Document, or Native Scan structure sub-tabs.



You can change the default values in the **Batch Name Example** and **Document Number Example**. When you make a new entry in these fields, the contents in the structure are automatically updated.

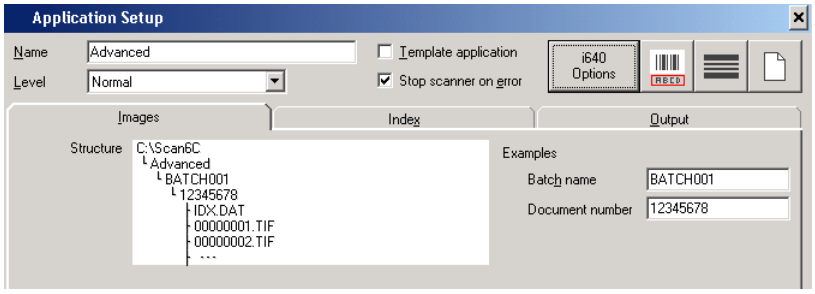
NOTE: The Batch name and Document number in the Images tab do not reflect an actual batch or document or the last batch/document used for an application. They are used for example purposes only to show what the Native Scan structure would look like for a given batch name and document number.

Batch setup

The Images - Batch tab allows you to define how the batch name is created and batch size limitations.

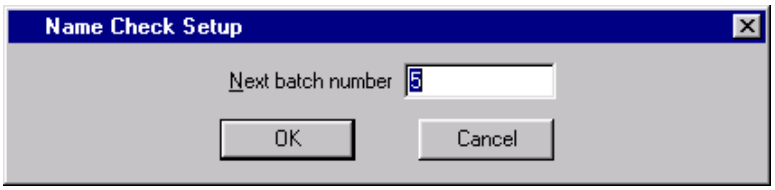
Standard Batch Name Setup

The first time a batch is created in Capture Software, you will be prompted to enter a new batch name. By default, Capture Software suggests BATCH001. If the batch name entered ends with a sequential number, this number becomes the global batch counter to be used across all applications.



Every time a batch is created for an application, Capture Software proposes the global batch counter +1 as the sequential number portion of the new batch name. For example, if the current batch name is CLAIMS09 (global batch counter 09), and a new batch is created, the new batch name by default will be named CLAIMS10.

Select **Setup** to change the global batch counter. The Name Check Setup dialog box appears.



If the number of digits in a batch name reserved for the batch counter is greater than the number of digits in the global batch counter value, Capture Software will zero-fill the global batch counter. Conversely, if the number of digits reserved for the batch counter cannot accommodate the global batch counter value, Capture Software truncates the left-most characters of the global batch counter.

New Every X Documents — if you enable this option and enter a value, Capture Software automatically creates a new batch when it reaches the specified quantity of documents in the batch.

NOTE: Creating a new batch every X documents is not available for Capture Software Lite.

Reset Document Counter — enabling this option resets the document number to 1 each time a new batch is started, regardless of how the new batch was created; otherwise document numbering continues to increment across batches.

Reset Image/Page Counter — when this option is enabled, the image numbering is reset to 1; otherwise, the image or page numbering continues to increment across batches. If you enable the **Reset Image/Page Counter** option on a document level, this option is not available (see the next section, “Document setup,” for more information).

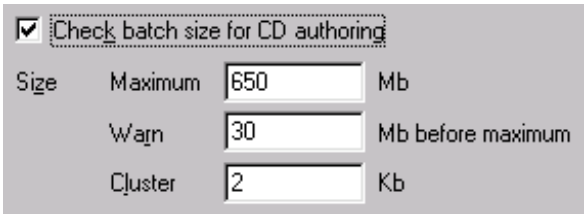
Documents – Minimum and Maximum — set the minimum required and maximum allowed quantity of documents in these fields. If you try to process a batch with fewer than the minimum number of documents, an error message will appear, allowing you to cancel batch processing or process the batch anyway.

If you scan more than the maximum allowed quantity of documents, an error message will appear. This message will appear with every additional document scanned above the maximum value set.

Entering “0” in these fields disables any checks.

Warn X Documents Before Maximum —i f this option is enabled, a message will appear when it reaches the specified quantity of documents before the maximum allowed number of documents. After the first message appears, no other message will be displayed until the maximum number of documents is exceeded.

Check batch size for CD authoring — if you intend to create CDs from scanned batches, enable this option.



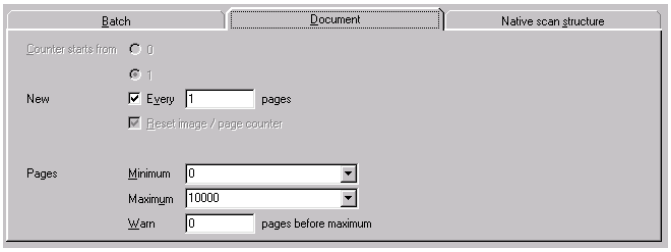
Size – Maximum X Mb — enter a value that is less than or equal to the number of megabytes one CD can hold (e.g., 650 MB for a 74-minute CD).

Size – Warn X Mb before maximum — when you are authoring CDs, enter a value in this field (20 MB by default) so Capture Software can warn you in advance and keep this amount free for any additional files; such as the CDVue viewer program and index files that will be included with the image files on the CD.

Size – Cluster X Kb — enter the cluster size of your destination media, not of the media where you temporarily store your images. The cluster size is the minimum number of bytes that will be occupied by a storage media. For CD-R for instance, each file will take a minimum of 2 KB even if the file is smaller than 2 KB. The cluster size can still be changed to make Capture Software compatible with alternatives to CD-R; such as, DVD-R or DVD-RAM.

Document setup

The Images - Document tab allows you to define document counting and document size limitations for the application.



Following is a description of the functions of the Document tab.

Counter Starts from — select one of the following options:

- **0** or **1** — allows you to set the starting document number for each batch. In this version of Capture Software, the document counter is always "1." If the **Reset Document Counter** option is disabled in the Images—Batch tab, then Starting Document Counter is not used.

NOTE: This option is not available when the IBS/Document CD Native Scan structure is selected.

New — select one or both of the following options:

- **Every X Pages** — creates a new document after the specified quantity of pages. (One page corresponds with one front and one rear; if the rear or front is auto-deleted, the remaining front or rear image counts as one page.) This is useful with transaction documents where each scanned page should become a document automatically.

  If this option is not enabled, Capture Software continues adding pages to the current document until a new document is created. Set the **Maximum** number of pages higher than "1" if a document occasionally has attachments.

  NOTE: Creating a new document every X pages is not available for Capture Software *Lite*.

- **Reset Image/Page Counter** — when this option is enabled, every new document will start with image number 1; otherwise the image number continues to increment across documents.

  NOTES: In this version of Capture Software, this option is always enabled. Therefore, the **Reset Image/Page Counter** will always be reset to "1" for every new document.

  This option is not available when the IBS/Document CD Native Scan is selected.

Pages — select one or both of the following options:

- **Minimum and Maximum** — enter the minimum required and maximum allowed quantity of pages (one page is one front plus one rear) in these fields. If you try to close a new document (by creating a new document) with fewer than the minimum number of pages, a warning will be displayed. This allows you to return to the document and continue adding pages. This option is useful in conjunction with **Stop Scanner on Error**.

  If you scan more than the maximum allowed quantity of images, an error message will appear. This message will appear for every additional image scanned above the maximum value set.

  Entering 0 in these fields disables any checks.

- **Warn X Pages Before Maximum** — if you enter a value, a message will appear when it reaches the specified quantity of pages before the maximum allowed number of pages.

Native scan structure

The Native scan structure tab allows you to select the on disk image structure after scanning. There are two Native Scan formats:

- IBS/Document CD
- App\Batch\Document\Image Structure

To define the Native Scan structure:

1. Define the root drive or path where you want to scan your images. The **Path** field accepts drive letters and UNC paths. Use the **Browse** button to select a root or path.

IMPORTANT: When scanning in a multiple Capture Software workstation environment where batches must be shared across workstations, you should use a UNC path to ensure proper access by all workstations.

2. Select the Structure from the drop-down list box.

Following is information regarding the two Native Scan formats you can set up.

IBS/Document CD

This structure is optimized for CD authoring or for an application with many single-page documents.

All documents for a batch are stored in the same batch directory under the root path. The images are stored in a subdirectory structure under the batch directory based on the Capture Software document number.

For example, document number 12345678 with five images is saved as:

8\67\12345001.TIF
8\67\12345002.TIF
8\67\12345003.TIF
8\67\12345004.TIF
8\67\12345005.TIF
8\67\12345IDX.DAT (contains the document index)

In this structure, multi-page documents can contain up to 999 images. When you select **Setup**, you can indicate whether the Native Scan structure will be created in a Document CD compatible format.

IBS / Document CD Scan Structure Setup
This structure is optimized for CD authoring or for applications with many single page documents.
Multi page documents can contain up to 999 images.
Scan directly in Document CD compatible structure
OK

This Document CD compatible structure is required when using the Document CD Batch output Format (see the section entitled “Output setup tab” later in this chapter). The Document CD Batch Output Format makes it possible to view documents and indexes with the CDVue application.

The xxxxxIDX.DAT file contains the document index fields. The IDX.DAT contains the following information:

[Record Format Type];[Format Version];[Document Number];
[Page Count];[Image Count];[Field 1];[Field 2];[Field 3];...

The following is a sample IDX.DAT record:

“I01q”;”01”;”0000000001”;”0000000058”;”0000000087”;”37865”;”C0009341”

All values are double-quoted and are separated by a semi-colon. A double-quote contained within an index field is doubled.

Example: ...;“378”“65”;... represents the value 378”65.

Following is a description of each field in the sample IDX.DAT file:

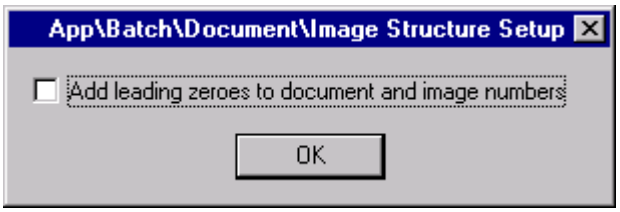
Record Format Type	I01q	Fixed length of 4 characters. A value of “I01q” indicates an IDX.DAT record.
Format Version	01	Fixed length of 2 characters. Initially, will always be “01”.
Document Number	0000000001	Fixed length of 10 characters, zero-filled.
Page Count	0000000058	Fixed length of 10 characters, zero-filled. Number of pages in the document.
Image Count	0000000087	Fixed length of 10 characters, zero-filled. Number of images in the document.
Index Fields		The next fields (37865 and C0009341) are the index values.

App\Batch\Document\Image Structure

This is the simplest and straightforward structure. All documents are located in a directory equal to the Batch name and all image files are located in a directory equal to the Document number.

This structure does not have the 999-page limitation and is ideal for large multi-page documents.

When you select **Setup**, you can select whether leading zeros will be added to document and image numbers.



By default, leading zeros will not be added.

Example

Document 12345678 with three pages (each page has a front and rear) in Batch B0001 and **Reset image/page counter** enabled is stored in following structure:

B0001\12345678\1.TIF
B0001\12345678\2.TIF
B0001\12345678\3.TIF
B0001\12345678\4.TIF
B0001\12345678\5.TIF
B0001\12345678\6.TIF
B0001\12345678\IDX.DAT

The IDX.DAT file contains the document indexes. The IDX.DAT contains following information:

[Record Format Type];[Format Version];[Document Number];
[Page Count];[Image Count];[Field 1];[Field 2];[Field 3];...

The following is a sample IDX.DAT record:

“I01q”;”01”;”0000000001”;”0000000058”;”0000000087”;“37865”;”C0009341”

All values are double-quoted and are separated by a semi-colon. A double-quote contained within an index field is doubled.

Example: ...;“378”“65”;... represents the value 378”65.

The following is a description of each field in the sample IDX.DAT file:

Record Format Type	I01q	Fixed length of 4 characters. A value of “I01q” indicates an IDX.DAT record.
Format Version	01	Fixed length of 2 characters. Initially, will always be “01”.
Document Number	0000000001	Fixed length of 10 characters, zero-filled.
Page Count	0000000058	Fixed length of 10 characters, zero-filled. Number of pages in the document.
Image Count	0000000087	Fixed length of 10 characters, zero-filled. Number of images in the document.
Index Fields		The next fields (37865 and C0009341) are the index values.

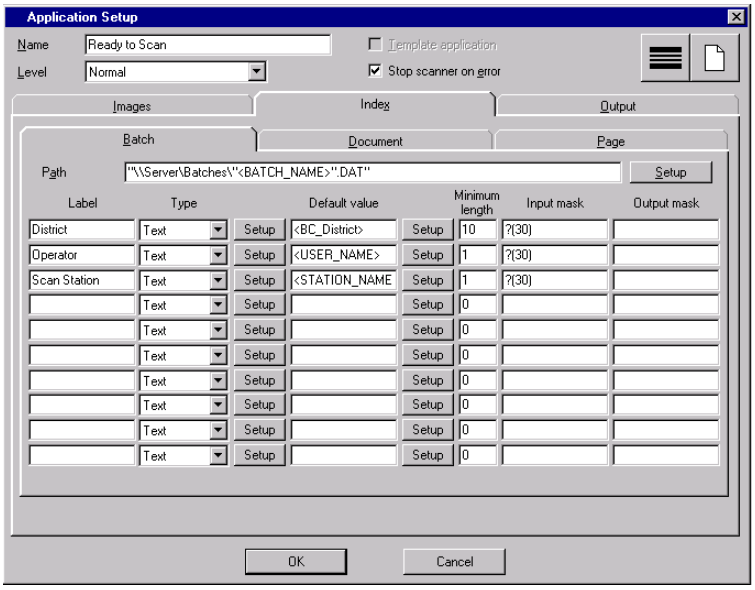
Index setup tab

The Index tab allows you to define index fields at two different levels: batch and document. Page level values are not yet supported.

NOTE: Only one batch and one document level index field can be defined for Capture Software *Lite*.

Batch setup

The Index - Batch tab allows you to define the index information you want to collect at the batch level.

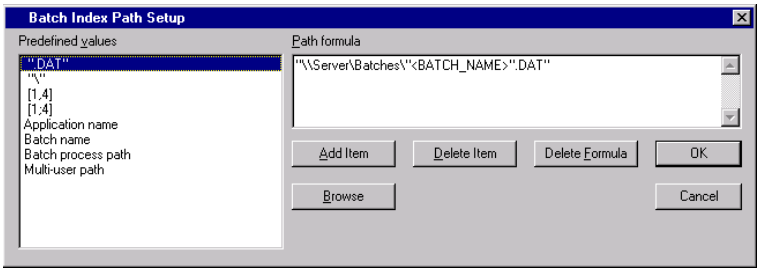


To set up batch level indexing:

1. In the **Path** field, enter the location and name of the batch index file that will be created after processing a batch.

   or

   Select **Setup** to access a list of default or pre-defined values that you can use to build the path.



   Batch Process path is the root directory where the batch will be located after being processed. For the Release Batch Output Format the Batch Process path is the Native Scan Structure path followed by the Application Name subdirectory (e.g., c:\Scan\Ready to Scan).

   For all other Batch Output Formats, the Batch Process path is equivalent to path specification defined in the Output tab of Application Setup (e.g., c:\Batches).

   Multi-user path is a shared folder location where application and page template files are located. The multi-user path is determined at installation. To change the multi-user path, go to the Program Properties dialog box as described in Chapter 11, *System Administration.*

To set up your path formula:

- Select a pre-defined value from the list box. After you select an item, click **Add Item**.

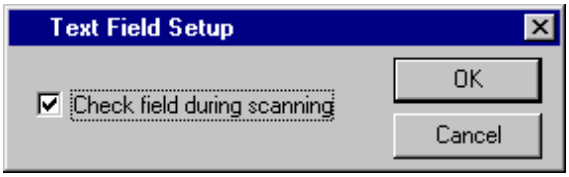
  Continue to add all pre-defined values until your path formula is complete.

- Click **OK** when the path formula is complete.

NOTES: Selecting **Delete Item** deletes the last pre-defined value added. **Delete Formula** deletes the entire path formula.

In addition to default values, the pre-defined values list contains syntax strings to help build a fully qualified path and file name (i.e., "\" and ".DAT"). You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a default value (e.g., [1, 4]). See the section entitled "Substring syntax" for formats and examples.

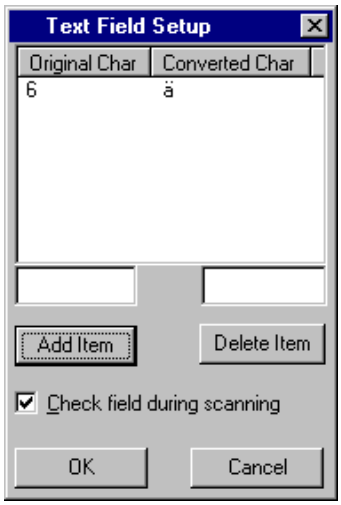
2. For each index field you wish to define, enter a description in the Label column.
3. Select **Text**, **Date/Time**, **Number**, or **Convert Chars** as the field type from the drop-down list box in the Type column.
4. Select the **Setup** button to the right of the Type field to indicate whether the index field value is checked during scanning.



When an index field is checked during scanning, the field's default value is audited against the Minimum Length and Input Mask requirements for the field. If the audit fails, you will be prompted during scanning to correct the field value. If all defined index fields are not checked during scanning, scanning is not interrupted. You must access the Batch Index Fields dialog box (**Edit Batch fields** option from the Index menu) to correct any invalid index field values.

You must enter character pairs in the **Convert Chars** text field setup. In the text box, enter an original character and the character to which the original character will be changed, then click on the **Add Item** button. This field type is useful for selected bar code types that do not allow special local language characters.

For example, with the value listed in the dialog box shown below, a bar code index value of “n6chste” would be converted to “nächste.”



5. Enter a **Default Value**, if applicable, or select the **Setup** button to the right of the Default Value field to access a list of default system values. See the section entitled “Default values” for a description on how to select and define a default value.
6. Enter the **Minimum Length** of the index field. If the index field is mandatory, then Minimum Length should be greater than 0 (zero).
7. Enter the **Input Mask** of the index field. The input mask defines the syntax or audit rules required for the field. See the section entitled “Mask syntax” for mask values and examples.

NOTE: Minimum Length and Input Mask are used together to determine what can be entered for an index field. For example, a Minimum Length of “4” and an Input Mask of “X(9)” means that the index field must contain between four (4) and nine (9) alphanumeric characters.

8. Enter the **Output Mask** of the index field.

   The output mask defines the output format of the field. This is primarily useful for formatting date fields or fields that have delimiter requirements; such as, social security or telephone numbers. For example, for a date field in month, day, year format:

Input mask	MMDDYY
Output mask	MM”/”DD”/”YY

NOTE: In this version of Capture Software, defining an output mask is available only for Date/Time fields.

9. Click **OK** when you are finished filling out the field information at the batch level.

   The batch index file, in addition to batch index fields, also includes the following statistical information about the batch so even if there are no batch index fields, a batch index file will still be created:

   - # of front/rear images in the batch
   - # of front/rear images rescanned
   - # of front/rear blank images removed
   - # of front/rear images deleted
   - # of documents in the batch
   - Document number of first document in the batch
   - Document number of last document in the batch

   The batch index file also contains information regarding the number, name, type and mask of the batch and document indexes defined for the application.

The following is a sample of a batch index file:

```
[Properties]
Version=1
BatchPath=C:\Batches\Batch008
CreationDate=1998:11:23
CreationTime=17:11:47
ProcessStartDate=1998:11:24
ProcessStartTime=16:44:44
User=XVCS
WorkStation=Kodak Scanner

[BatchStatistics]
FrontsInBatch=9
FrontsRescanned=1
FrontsBlanksRemoved=0
FrontsDeleted=1
RearsInBatch=9
RearRescanned=1
RearsBlanksRemoved=0
RearsDeleted=0
FirstDocument=1
LastDocument=2
DocumentCount=2

[BatchFields]
Count=2
Label1=Box #
Type1=TNBR
Mask1=99
Label2=Bin Number
Type2=TTXT
Mask2=X(3)

[DocumentFields]
Count=2
Label1=Invoice Number
Type1=TTXT
Mask1=9(7)
Label2=Customer ID
Type2=TTXT
Mask2=?(6)

[PageFields]
Count=0

 [BatchIndex]
Field1=27
Field2=3B
```

To disable the creation of the batch index file, clear the entry in the Path field.

Document setup

The Index - Document tab allows you to define the index information you want to collect at the document level.

The document index is stored in one file per document and is located in the same directory as the document images. The name of the file depends upon the selected Native Scan structure (**xxxxxIDX.DAT** for the **IBS/Document CD** structure and **IDX.DAT** for the **App\Batch\Document\Image** structure). A Batch Output Format, such as single-page TIFF, can convert the separate .DAT files into one single index file.

Index file format

The Document index has the following format (that can be converted with a Batch Output Format):

[Record Format Type];[Format Version];[Document Number];
[Page Count];[Image Count];[Field 1];[Field 2];[Field 3];...

The following is a sample document index file:

“I01q”;”01”;”0000000001”;”0000000058”;”0000000087”;”37865”;”C0009341”

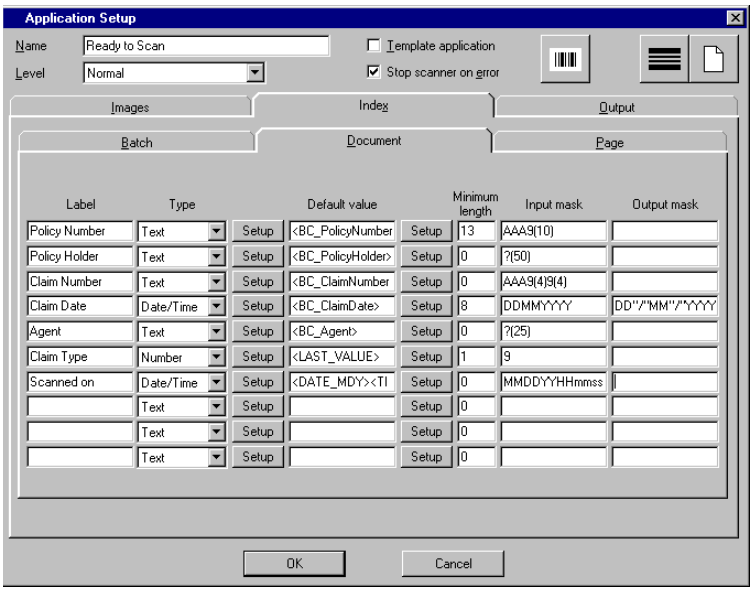
All values are double-quoted and are separated by a semicolon. A double-quote contained within an index field is doubled.

Example: ...;“378”“65”;... represents the value 378”65.

The following is a description of each field in the sample IDX.DAT file:

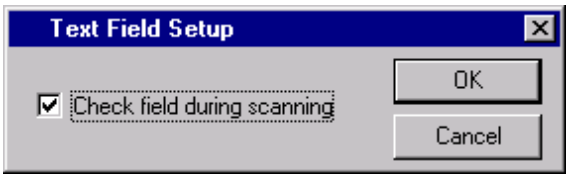
Record Format Type	I01q	Fixed length of 4 characters. A value of “I01q” indicates an IDX.DAT record.
Format Version	01	Fixed length of 2 characters. Initially, will always be “01”.
Document Number	0000000001	Fixed length of 10 characters, zero-filled.
Page Count	0000000058	Fixed length of 10 characters, zero-filled. Number of pages in the document.
Image Count	0000000087	Fixed length of 10 characters, zero-filled. Number of images in the document.
Index Fields		The next fields (37865 and C0009341) are the index values.

Every document corresponds with one index file.



To set up document level indexing:

1. For each index field you wish to define, enter a description in the **Label** column.
2. Select **Text**, **Date/Time**, **Number**, or **Convert Chars** as the field type from the drop-down list box in the Type column.
3. Select the **Setup** button to the right of the Type field to indicate whether the index field value is checked during scanning.



When an index field is checked during scanning, the field's default value is audited against the Minimum Length and Input Mask requirements for the field. If the audit fails, you will be prompted during scanning to correct the field value. If all defined index fields are not checked during scanning, scanning is not interrupted. You must access the Document Index Fields dialog box (**Edit Document fields** option from the Index menu) to correct any invalid index field values.

NOTE: For a description of the **Convert Chars** field type, refer to the section entitled "Batch setup" earlier in this chapter.

4. Enter a **Default Value**, if applicable, or select the **Setup** button to the right of the Default Value field to access a list of default system values. See the section entitled “Default values” for a complete description on how to select and define a default value.
5. Enter the **Minimum Length** of the index field.

   If the index field is mandatory, then Minimum Length should be greater than 0 (zero).
6. Enter the **Input Mask** of the index field.

   The input mask defines the syntax or audit rules required for the field. See the section entitled “Mask syntax” for examples.

NOTE: Minimum Length and Input Mask are used together to determine what can be entered for an index field. For example, a Minimum Length of “4” and an Input Mask of “X(9)” means that the index field must contain between four (4) and nine (9) alphanumeric characters.

7. Enter the **Output Mask** of the index field.

   The output mask defines the output format of the field. This is primarily useful for formatting date fields or fields that have delimiter requirements; such as social security or telephone numbers. For example, for a date field in month, day, year format:

   Input mask MMDDYY

   Output mask MM”/”DD”/”YY

   NOTE: In this version of Capture Software, defining an output mask is only available for the Date/Time fields.
8. Click **OK** when you are finished filling out the field information at the document level.

Page setup

In this version of Capture Software, page level indexes are not available.

Converting Date (Year) value to Output Mask

When converting Date field values that include the Year (input according to the Input Mask) to meet Output Mask requirements, Capture Software does the following:

Four-character year values are converted to two-character year values by truncating the century of the year. For example:

Input Mask	Output Mask
YYYYMMDD	**MM"/"DD"/"YY**
19981220	12/20/98
20000519	05/19/00

Two-character year values are converted to four-character year values using the following assumptions/procedure:

A valid century range of year values is first determined based on the year of the current system date. For the first year, 95 is subtracted from the current system year. For the last year, 4 is added to the current system year.

Current System Year	Valid Century Range
1998	1903 to 2002
2000	1905 to 2004

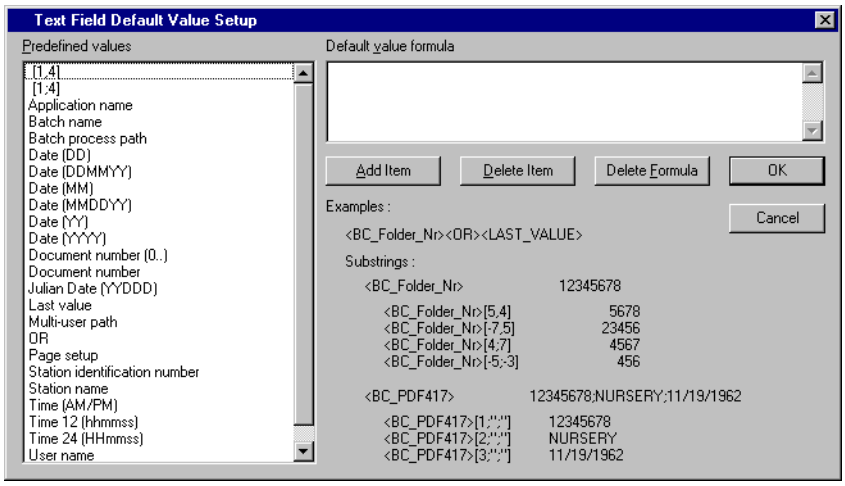
The two-character year is then converted to a four-character year based on the valid century range of years. For example, assuming the current system year is 1998, the following conversions would take place:

Input Mask	Output Mask
MMDDYY	**MM"/"DD"/"YYY**
032305	03/23/1905
122099	12/20/1999
063001	06/30/2001

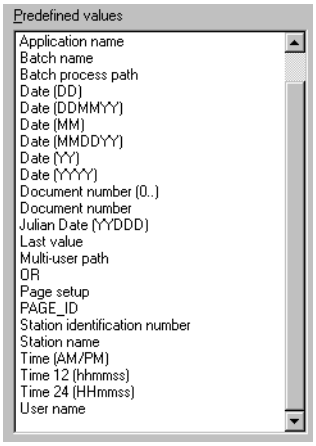
If this year conversion assumption is incorrect for your target imaging system and results in incorrect output date values, then the Input Mask for the Date field should be redefined to include a four-character year.

Default values

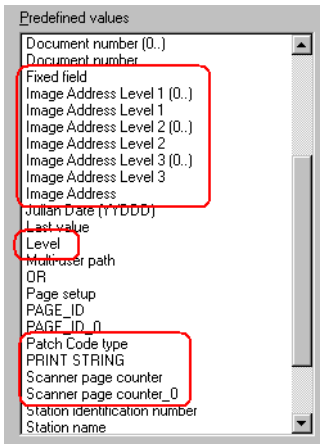
Assigning default values to index fields will automate the indexing that is done during scanning. To define a default value for an index field, select the **Setup** button to the right of the Default Values field. The Text Field Default Value Setup dialog box for the corresponding field type appears.



The left side of the dialog box contains the list of default or pre-defined values that you can use to build the default value formula. The following default values are possible.



For all high volume scanners, including the i800 Series Scanners, the following additional default values (highlighted below) are possible:



For *Text* and *Convert Chars* fields, all default values listed are available. For *Date/Time* fields, only the fields that relate to the date and time values and Last value are available. For *Number* fields, only **Document Number** and **Last value** are available. In addition, string values, such as “PRIORITY” or “CLAIM,” can be manually entered for a default value.

NOTES: When **Last value** is selected, Capture Software automatically uses the last assigned value for a field from the previous batch (for batch indexes) or document (for document indexes) whenever a new batch or document is created. This is useful, for example, in a backlog application, when you scan folders of documents with the same date. When you start scanning, enter the date once and it remains the same for every new document until you change it.

The time default values: **Time (12)** and **Time (24)** include the hour, minutes and seconds for a total of six characters.

The **Document Number** default values assign the number of the current Capture Software document to the index field. The value can either be of varying length or padded with leading zeroes to form an eight-character document number. For example:

Default Value	**Result**
Document Number	256
Document Number (0…)	00000256

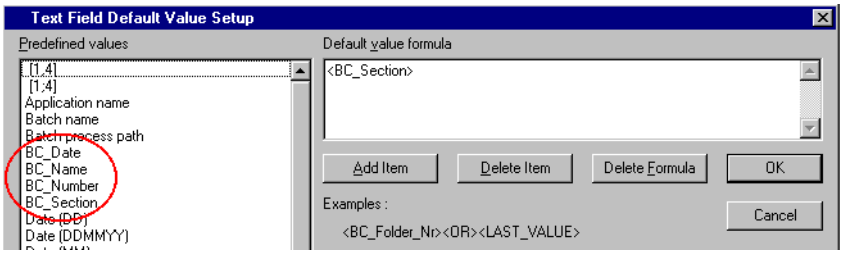
The **Image Address Level** default values assign the Image Address value of the first scanned and stored page in the current document to the index field. The value can be either of varying length or padded with leading zeroes to form a nine-digit number.

The **Print String** and **Scanner Counter** default values will also be available with all scanners that have an optional imprinter installed. When selected, the value of the first scanned and stored page in the current document is assigned to the index field.

Default values are assigned during scanning when a new batch or document is created. If you decide to change your Application Setup and add index fields that contain default values after a batch of documents has already been created, the default values will not be assigned to the existing batch or documents, and new index fields will not have a value.

Assigning bar codes/OCR text zones to index fields

When bar codes or OCR text zones are defined for the application, they become available for indexing in the default value list.



The default value name for the bar code is BC_[Label] where Label is the name specified when defining the bar code zone. Batch level bar codes are available for batch and document index fields. Document level bar codes are only available for document index fields. The default value name for the OCR text zone is OCR_[Label].

To assign a bar code/OCR text zone to an index field, select the appropriate bar code/OCR default value as the default value for the index field. The entire bar code/OCR text zone or a portion of the bar code/OCR text zone can be used (see the section entitled “Substring syntax” for details). As a result, different portions of a single bar code/OCR text zone can be used as default values for more than one index field.

NOTES: Bar code and OCR text zone detection and indexing are not available for Capture Software Lite.

Bar codes or OCR text and Last Value

In file folder applications it is often customary to use bar code/OCR text zone header sheets to index all of the documents in the folder. The lead document contains all bar codes/OCR text zones and subsequent documents may contain no bar codes/OCR text zones or a subset of the bar codes/OCR text zones. To index documents in these applications, an index field is either assigned the bar code/OCR text zone (when it exists) or the value from the previous document. The previous or last value keeps getting assigned until the next bar code/OCR header sheet is scanned.

To accomplish this indexing scheme in Capture Software, the default value must either be the bar code or **Last Value**. This is specified by using the “or” symbol as in the following example:

<BC_NAME><OR><LAST_VALUE>

or

<OCR_NAME><OR><LAST_VALUE

Default value formula

A default value for a field can consist of one or more default values as specified in the Default value formula. To set up your Default value formula:

1. Select a pre-defined value from the list box.
2. Click **Add Item** after you select an item.
3. Continue to add all pre-defined values until your default value formula is complete.
4. Click **OK** when the default value formula is complete.

NOTES: Selecting **Delete Item** deletes the last pre-defined value added. **Delete Formula** deletes the entire Default value formula.

You can also use a special substring syntax, enclosed within square brackets, to retain a certain portion of a default value (e.g., [1,4]). See the next section, “Substring syntax,” for formats and examples.

Substring syntax

You can use a special syntax enclosed within square brackets to retain a certain portion of the default value. The syntax immediately follows the value you want to change.

The system can have two formats:

- comma delimiter: [START_POSITION,NUMBER_OF_CHARACTERS]

  or

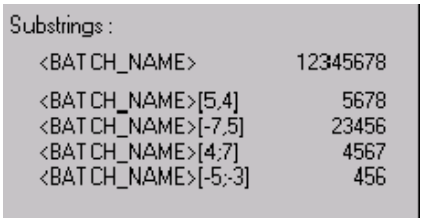
- semicolon delimiter: [START_POSITION;STOP_POSITION]

When START_POSITION is a positive value, the position is determined by counting from the left side. When START_POSITION is a negative value, the position is determined by counting from the right side.

The same is valid for STOP_POSITION in the semicolon format.

Negative NUMBER_OF_CHARACTERS values are not allowed. None of the values can equal 0 (zero).

Following is an example of a Capture Software Default Value dialog box:



Test example

Capture the first five characters of the Batch name and the last four characters of the Station ID in one field.

Solution

<BATCH_NAME>[1;5]<STATION_ID>[-4,4]

If the Batch name is INSUR035 and the Station ID is T0015, the result is INSUR0015.

Special syntax for PDF417 bar codes

When using PDF417 bar codes, a single bar code can be used to contain all the index data for a document or batch. To facilitate indexing with PDF417 bar codes, a special substring syntax has been added in Capture Software:

[# OF DATA ELEMENTS IN BAR CODE; DELIMITER USED TO SEPARATE DATA ELEMENTS]

The delimiter can either be the actual character symbol or its ASCII decimal numeric value (for symbols that cannot be printed or typed). The delimiter must be contained in double quotes (“).

For example, if a PDF417 bar code contains the following data:

12345678*NURSERY*11/19/1962

the following could be used as default values for the three index fields of data:

Default Value	Actual Value
<BC_PDF417>[1; “*”]	12345678

Returns the 1st element of the bar code string delimited by an asterisk.

<BC_PDF417>[2; “42”]	NURSERY

Returns the 2nd element of the bar code string delimited by an asterisk (42 is the ASCII decimal value for asterisk).

<BC_PDF417>[3; “*”]	11/19/1962

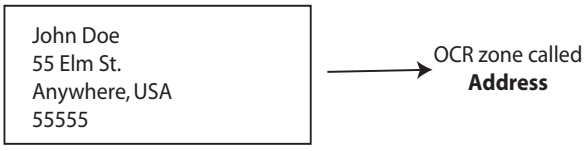
Returns the 3rd element of the bar code string delimited by an asterisk.

NOTE: Bar code detection and indexing are not available for Capture Software Lite.

Indexing Multi-line OCR

When indexing multiple lines of OCR data, such as an address label, the PDF417 special substring syntax can be used to break up the OCR data into multiple index fields.

When Capture Software detects more than one line of OCR data in an OCR zone, it will insert a special delimiter (the “^” character) in between the lines of data. The result is shown in the following example:



The index data assigned to the OCR zone would be as follows:

John Doe^55 Elm St^Anywhere, USA^55555

As a result, the following could be used as default values for the four index fields of data:

Default Value	Actual Value
<OCR_Address>[1; “^”]	John Doe
<OCR_Address>[4; “^”]	55 Elm St.
<OCR_Address>[3; “^”]	Anywhere, USA
<OCR_Address>[4; “^”]	55555

Mask syntax

Following are mask syntax values and some examples of how to use them.

A	Strict alpha (no symbols such as: - _ ( ) + … are allowed).
9	Strict numeric (no symbols such as - _ ( ) + … are allowed).
X	Alpha and/or numeric (but no symbols such as - _ ( ) + … are allowed).
?	Anything (including special symbols and spaces).
D,M,Y	Date characters. The mask for a Julian date is YYDDD.
HH,hh,mm,ss,tt	HH = 24 hours, hh = 12 hours, mm = minutes, ss = seconds, tt = AM/PM
“FIXED TEXT”	Everything between double quotes is a fixed required value.

NOTE: The A and X mask syntax characters can be lower- or uppercase. The date mask syntax characters (D,M,Y) must be uppercase.

Example

9(4) or 9999	for a four-character numeric field.
A(4) or AAAA	for a four-character alphabetic text field.
MMDDYY	for a six-character date field in month, day, year format.
999”-“ 99”-“ 9999	for a delimited Social Security Number.

NOTES: If the index field value must exactly match the **Input Mask**, make sure that the **Minimum Length** specified is equal to the number of characters represented by the Input Mask.

For example, if the Input Mask is AA9(6), set the Minimum Length to 8.

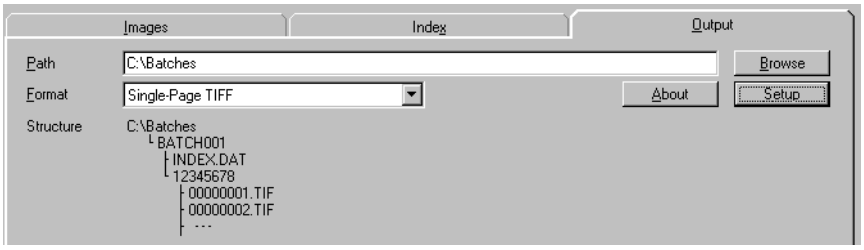
Output setup tab

The Output tab of Application Setup allows you to select the Batch Output Format for the application.

When batches are processed (by clicking the **Process** button or selecting the **Batch>Process** option from the main Capture Software window), the index data and images for the batch are converted and/or transferred according to the selected Batch Output Format. Capture Software contains its own list of Batch Output Formats as documented later in this section. Integrators can also develop their own index and image conversion routines based on the Capture Software Batch Output Format API (documented and located in DOCS\EN\KodakCaptureSoftwareBatchOutputAPI.DOC on the Capture Software CD).

NOTE: The full version of Capture Software supports all of the Batch Output Formats. Capture Software *Lite* only supports the following Batch Output Formats:

- Single-page TIFF/JPEG
- Multi-page TIFF
- Release
- PDF
- Multiple Batch Output Formats
- IRISPdf (10 pages per batch limit)
- Document CD
- Enhanced Multi-Page Document
- Enhanced Single Image
- Multi-Page TIFF 300 DPI Conversion
- Single-Page TIFF 300 DPI Conversion
- Uncompressed Images
- Document Express with DjVu (Lizard Tech)
- Silas Reveille for *Kodak* Capture Software



Following describes the functions of the Output tab.

Path — fill in the starting or root path where you want to transfer the batch after batch processing is completed. This field is not used and is unavailable when the Document CD or Release Batch Output Formats are selected.

IMPORTANT: In a multiple scanner environment where processed batches for an application must be transferred to the exact same physical root path, you should use a UNC path (e.g., \\server\batches) to ensure proper access by all Capture Software workstations.

Format — select the correct Batch Output Format from the drop-down list box.

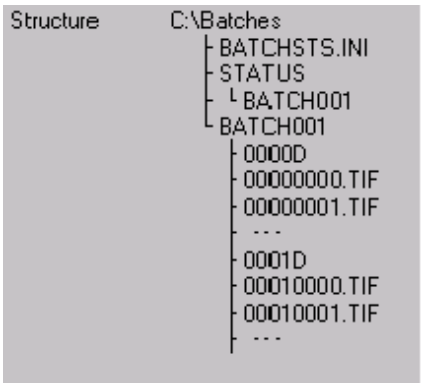
About — accesses a Readme text file describing the Batch Output Format.

Setup — accesses a setup dialog box specific to the Batch Output Format selected. After selecting and setting up a Batch Output Format, the sample structure of the Batch Output Format that is displayed in the Output tab is automatically updated.

Batch Index (Eastman Imaging for Unix)

When the Batch Index (Eastman Imaging for Unix) Batch Output Format is selected, the image output is converted to Batch Index (Eastman Software, Inc.) format (Version 1.3 for Imaging for UNIX; Version 1.4 for Imaging for NT) during batch processing. No setup is required.

The Batch Index output structure after processing looks like this:



The BATCHSTS.INI file is created/updated as necessary each time a batch is processed. The following is an example BATCHSTS.INI file for the sample Batch Index Output structure above:

[Batch Status Dir Path]

Dir Path=C:\Batches\status

The batch files (which have the same name as the Capture Software batch names; BATCH001 in the sample structure above) created in the STATUS directory contain two sections: [Current Status] and [History].

The Status entry of the [Current Status] section may have the following values:

0 : when the batch is being created (processed)

20 : when the batch is fully processed

The [History] section contains two entries:

0=Created XVCS 1998:07:28 19:20:19 when the batch is being created, (i.e., Status=0).

1=Accepted XVCS 1998:07:28 19:20:29 when the batch is processed, (i.e., Status=20).

The following is an example batch file for a batch that has been fully processed:

```
[Current Status]
Status=20
Operator ID=XVCS
[History]
0=Created      XVCS  1998:02:20  08:10:03
1=Accepted     XVCS  1998:02:20  08:10:51
```

For each document exported, one index file is created. The file name is the document number followed by a “d” and no extension. The document number is the document number given during scan, minus one. Up to 9999 documents may be exported (i.e., documents 0 to 9998). Each document contains up to 999 images.

The image number is the image number given during scan, minus one (i.e., image 0 to 998).

All document level index fields, and their associated values, defined for the application (Index - Document tab of Application Setup) are written to the document index files. The field names written to the index files are the Label names of the Capture Software document index fields.

The following is an example document index file where the Document Index field labels are Customer number and Invoice:

```
[ScanData]
Customer number=72543
Invoice=C0009341
```

For information about the content/structure of the BATCHSTS.INI file, the batch status files, and the document index files, refer to the Batch Index documentation.

Document CD

The Document CD Batch Output Format does not copy image files but instead just adds to the Native Scan structure those additional files and subdirectories that are required to author a Document CD. A Document CD is a Kodak standard directory structure containing single-page TIFF image files and document index data, along with an on-board image retrieval and display application. Capture Software generates the same Document CD format that is currently produced by the KoVIS/IBS/PC Plus and HVCS products.

The Document CD Batch Output Format requires that the Native Scan structure for the application is set to **IBS/Document CD**. In addition, the option **Scan directly in Document CD compatible structure** must be enabled. If this Native Scan structure option is not enabled, an error message will appear when you try to save the application setup.

A Document CD consists of the following directory structure:

```
DOC_CD
    |
    |-DATA
    |
    |-DATABASE

APP_SPEC
    |
    |-XFERDATA
    |
    |-CDVUE
```

DOC_CD\DATA contains the image files for the batch. When images are originally scanned, Capture Software stores the images directly to this directory in the Native Scan structure (also referred to as the Scan Cache). The path for the Scan Cache is indicated in the Native Scan structure tab of Application Setup. Each Capture Software batch has its own Document CD directory structure in the Scan Cache. When the batch is processed, the images remain in this directory.

DOC_CD\DATABASE contains the document index data for all of the documents in the batch. The document index files are created when the batch is processed.

APP_SPEC\XFERDATA contains an optional index import file for KoVIS/IBS/PC Plus. When configuring the Document CD Batch Output Format, you indicate whether you want to create an IBS/PC Plus-compatible CD. The IBS/PC Plus index import file is created when the batch is processed. The name of the file is <Capture Software Batch Name>.EX3.

APP_SPEC\CDVUE contains the CDVue which is the on-board image retrieval and display application. The CDVue application is currently a 16-bit application and should run without any problems under Windows NT. CDVue can either be run directly from the CD by running CDVUE.EXE from the CDVUE subdirectory or can be run locally from your PC. To install a local copy of CDVUE, run SETUP.EXE from the CDVUE subdirectory.

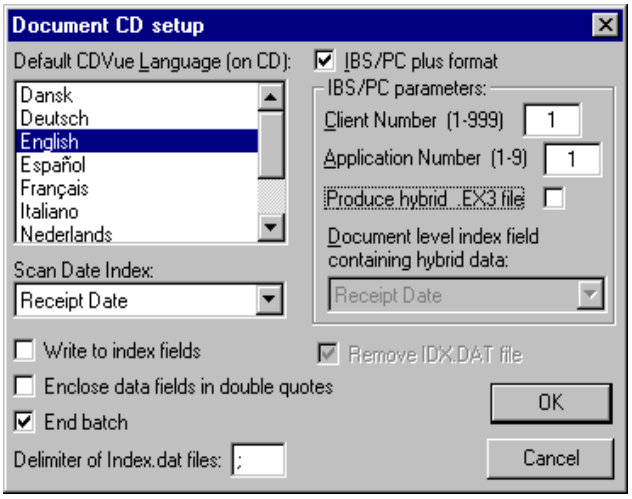
NOTES: HVCS 16-bit and KoVIS/IBS/PCPlus include both CDVue and the *Kodak Optistar* CD Image Retrieval Applications on Document CDs. Capture Software includes just the CDVue application.

The CDVue application currently does not support color image display.

The Document CD Batch Output Format cannot be used in conjunction with the Electronic Microimager Software (EMS) as the EMS batch output format does not support the IBS/Document CD Native Scan structure.

Document CD Application Setup

After configuring the Native Scan structure for Document CD compatibility, select **Setup** in the Application Setup - Output tab to further define the Document CD Batch Output Format.



Select a language in the **Default CDVue Language (on CD)** list box. CDVue is available in Brazilian Portuguese, Danish, Dutch, English (default), French, German, Italian, Spanish, and Swedish. The language selected is the language that is run when CDVue is run directly from a Document CD. In addition, the language selected will be the default language to be installed when you install a local copy of CDVue on your PC.

Enable the **IBS/PC plus format** option to create KoVIS/IBS compatible CDs. An index import file (.EX3 extension) will be created on the CD that will enable the indexes for the documents on CD to be imported into a KoVIS/IBS/PC Plus system. When you enable this option, you must also enter the correct Client and Application Number of the corresponding KoVIS/IBS/PC Plus application.

When scanning with the Scanner/Microimager 990, enable the **Produce hybrid .EX3 file** option to include the microfilm Roll and Frame (i.e., Image Address) information for each document in the EX3 import file. When this option is enabled, you must specify the document level index field that contains the hybrid data. It is suggested that you define <HEADER>[121;215] as the default value for this index field as this will extract the Roll and Frame information from the image header of the scanned document.

By default, the index file created for CDVue (INDEX.DAT located in DOC_CD\DATABASE) contains the date that the Document CD batch was processed for each scanned document. To change this default behavior, specify a **Scan Date Index**. The Scan Date Index must be a document level index field in the format of YYYYMMDD. When a Scan Date Index is specified, enable the **Write to index fields** option to include the Scan Date Index in the index data field portion of the INDEX.DAT file. Enabling this option allows the Scan Date Index to be entered in the search criteria in the CDVue application.

To remove the individual IDX.DAT files in the Document CD Scan Cache, enable the option **Remove IDX.DAT file**. When an IBS/PC Plus compatible CD format is enabled, this option is automatically enabled.

To create a Document CD index file that is compatible with an HVCS version 1.0 Document CD format, enable the **Enclose data fields in double quotes** option. In addition, you have the option of specifying the **Delimiter of Index.dat files**. By default, the delimiter is a semi-colon (;).

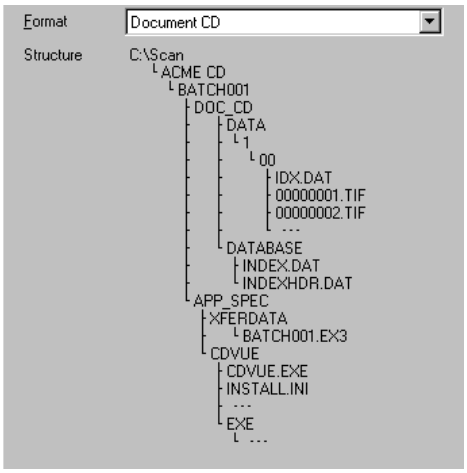
To complete the setup of your Document CD application, enable or disable the **End batch** option. When End batch is disabled and the Document CD batch is processed, the Document CD batch is updated for use with CDVue. However, the batch is still active and accessible in Capture Software. You can create a CD at this time to make the scanned documents accessible to users/ customers. However, you can scan more documents into the batch and process the batch again. This will update the image and index portions of the Document CD structure with the new documents. You can continue scanning until the batch becomes large enough to fill up a CD. When the CD is deemed full and the batch is complete, go back into Application Setup and enable the End batch option. When End batch is enabled and the batch is processed, the batch is flagged as complete and is no longer accessible in Capture Software.

Make sure you enable the **Check batch size for CD authoring** option in the Images - Batch tab of Capture Software Application Setup. This will prevent overflowing the maximum capacity of a writable CD.

Finally, define one or more document index fields as required.

Authoring a Document CD

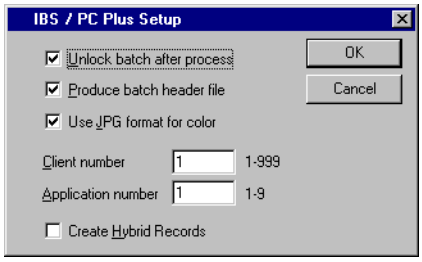
Once you have finished scanning documents into a batch, process the batch to finalize the Document CD structure. For example, if the Scan Cache for the application is C:\SCAN, the Capture Software application name is “Acme CD,” and the Capture Software batch name is BATCH001, the directory structure will be the following:



To create a CD, transfer the contents of the Capture Software batch name directory (e.g., BATCH001) to a writable CD. Do not include the batch name directory itself. Capture Software does not include CD authoring software. Use a CD authoring package of your choice to create the actual Document CD.

KoVIS and IBS/PC Plus (eiStream)

The KoVIS/IBS/PC Plus output format is one of the standard Capture Software Batch Output Formats. Use this format when producing batches that will subsequently be imported into a KoVIS (Kofile Visual Information System) or an IBS/PC Plus system. Select the **Setup** button for additional settings.



From the IBS/PC Plus Setup dialog box, you can specify the correct KoVIS/IBS Client and Application number. By default the Client number and Application number are 1.

The **Unlock batch after process** option prevents KoVIS/IBS users from working with a batch during batch transfer. This option creates and updates an entry for the batch in the BATCHES.INI file during batch processing. This option should remain enabled.

The **Produce batch header file** option passes information about the batch to KoVIS/IBS/PC Plus. Included are the first and last document number and the number of documents and images in the batch. For KoVIS/IBS/PC Plus systems that are at Version 2.0 or higher, this option should remain enabled. For IBS/PC Plus systems at Version 1.x, this option must be disabled.

The **Use JPG format for color** option will save color images scanned with a Kodak color scanner as JPEG files (with a “JPG” file extension). bi-tonal images are saved as TIFF G4 files (with a “TIF” file extension). For example, if you scan two pages with simultaneous output of color and bi-tonal images with an i840 Scanner into Document 1, this batch output can be produced:

BATCHES\BATCH001\1\00\00000001.JPG
BATCHES\BATCH001\1\00\00000002.TIF
BATCHES\BATCH001\1\00\00000003.JPG
BATCHES\BATCH001\1\00\00000004.TIF
BATCHES\BATCH001\1\00\00000005.JPG
BATCHES\BATCH001\1\00\00000006.TIF
BATCHES\BATCH001\1\00\00000007.JPG
BATCHES\BATCH001\1\00\00000008.TIF

If **Use JPG format for color** is not checked, any color images will be saved as TIFF files with JPEG compression.

The **Create Hybrid Records** option will create IDX.DAT records containing microfilm Roll and Frame (i.e., Image Address) information for scanned documents. This option will only take effect when Capture Software is configured to work with the Electronic Microimager Software. In this configuration, Multiple Batch Output Formats (MBO) is the selected Batch Output Format. In the setup of MBO, the Electronic Microimager Software must be the first Batch Output Format selected, followed by KoVIS and IBS/PC Plus. For more information about configuring a Capture Software application to work with Electronic Microimager Software, refer to *Kodak Electronic Microimager Software User’s Guide*, A-61191.

When a batch is processed, the images and index data are stored in a subdirectory equivalent to the Capture Software batch name under the path specified in the Capture Software Output tab of Application Setup. This root path (by default C:\BATCHES) must be the same as specified in the IBS.INI file (“BATCHES=” entry).

IRISPdf

IRISPdf is an application that is bundled with Capture Software for i30/i40 Scanners, i50/i55/i60/i65/i80 Scanners, i100 Series Scanners and i200 Series Scanners. It is available only with the purchase of Capture Software v 6.0 or higher and is not available with upgrades from previous versions. It is not available in any of the downloads on the Capture Software web page. IRISPdf allows the conversion of scanned batches to fully searchable PDF files and full-page OCR.

Limits to this functionality in Capture Software:

- Capture Software *Lite*: 10 pages per batch
- Capture Software for i30/i40 Scanners: limited to a total of 5,000 pages
- Capture Software for i50/i55/i60/i65/i80 Scanners: limited to a total of 10,000 pages
- Capture Software for i100 Series Scanners: limited to a total of 25,000 pages
- Capture Software for i200 Series Scanners: limited to a total of 50,000 pages

NOTES: If you are scanning duplex and with simultaneous output of color and bi-tonal images, only the color images will be processed. However, the bi-tonal images are used for OCR processing and will make batch output processing faster than when scanning in color only.

If you wish to use IRISPdf beyond these limits, you must purchase the full version of IRISPdf from I.R.I.S.

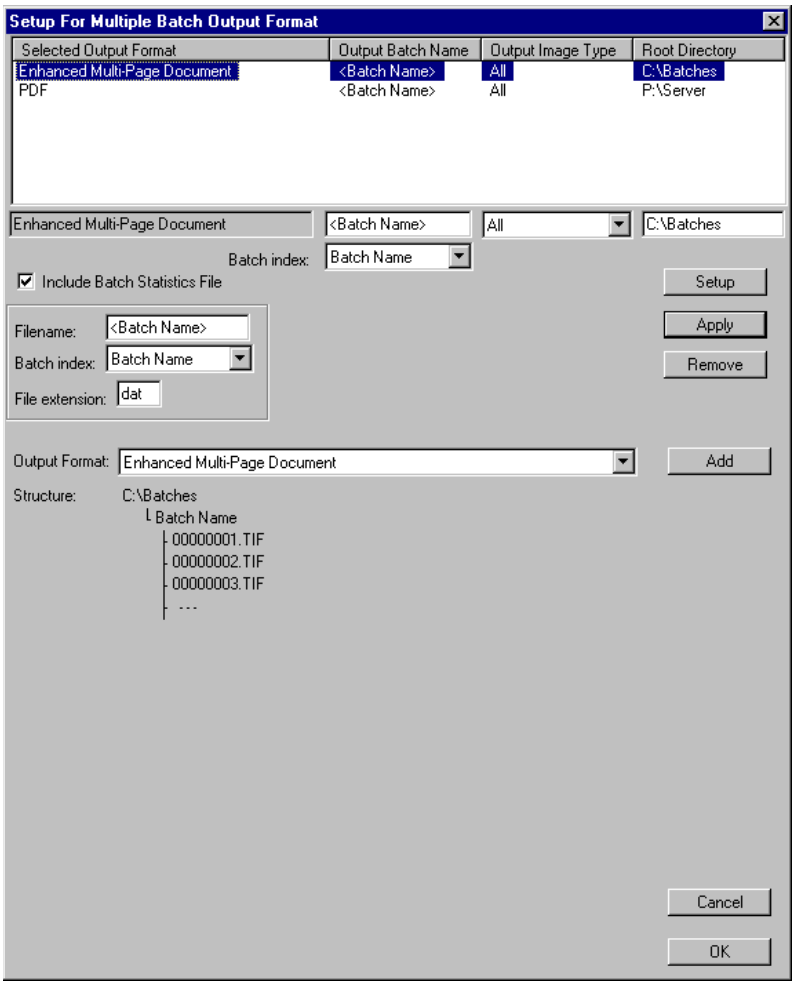
Any questions about IRISPdf should be addressed to I.R.I.S. Contact information for I.R.I.S. can be found in the About information for the IRISPdf Batch Output Format. The is accessed by selecting IRISPdf in the Output tab of the Application Setup dialog box and clicking on the About button.

More detailed information about IRIS Pdf can be found in the IRISPdf User's Manual located in the DOCS directory on the Capture Software CD.

Multiple Batch Output Format

This Batch Output Format will process the same batch to one or more Batch Output Formats that are available in Capture Software. Batch output Format processing is effectively “daisy-chained” such that the batch can be output to more than one location in more than one format by simply clicking once on the **Process** button from the main screen of Capture Software.

To specify the Batch Output Formats to be processed, click on the **Setup** button to display the Setup dialog box for Multiple Batch Output Formats.



Selecting Batch Output Formats

From the Output Format drop-down list in the Setup dialog box, select a Batch Output Format and click on the **Add** button to add the Batch Output Format to the list box of Selected Output Formats. The list box of selected Batch Output Formats is displayed at the top of the Setup dialog box. Select and click on the **Add** button for each Batch Output Format to which the batch will be processed.

To remove a Batch Output Format from the Select Output Format list, highlight the Batch Output Format and click on the **Remove** button.

The order that the Batch Output Formats are selected and displayed in the list box is the order of batch output processing. Batch output processing must be successful for each Batch Output Format selected in order for Multiple Batch Output Format processing to be considered successful. Any errors encountered in any Batch Output Format will cause batch processing to terminate immediately and control to return to the main Capture Software screen.

For each Selected Output Format, you must specify the Output Batch Name, Output Image Type, and Root Directory settings.

IMPORTANT: The combination of the Output Batch Name and Root Directory must be unique for each Batch Output Format. Otherwise, you will get an error when trying to exit the Setup dialog box.

Changing settings

1. Click on a Batch Output Format name in the Selected Output Format column of the list box.
2. Change the setting using the entry box or drop-down list in the appropriate column directly underneath the list box of selected Batch Output Formats.
3. Click on the **Apply** button.

Output Batch Name

Most Batch Output Formats create a batch subdirectory and the Output Batch Name will be used as the name of the batch subdirectory. By default, the Output Batch Name is the name of the batch when it was created (<Batch Name>). The Output Batch Name can only be made up of one or more Batch Index fields. Do not enter any text in the box. To change the Output Batch Name, select one or more Batch Index fields from the drop-down list and click on the **Apply** button.

Output Image Type

When batches contain both color and bi-tonal images, select what image type(s) will be output for each selected Batch Output Format. Select All, bi-tonal Only, or Color/Grayscale Only from the drop-down list and click on the **Apply** button. This setting is especially useful when scanning in simultaneous color and bi-tonal (i.e., dual stream). Color images can be directed to the target Content Management system while bi-tonal images can be output to the *Kodak* i4800 or i9600/i9620 Digital Archive Writer.

Root Directory

The root directory contains the root output path to where batch output will be transferred for the selected Batch Output Format. By default, the root directory is the path specified in the Output tab of Application Setup. To change the root output path, specify a different path in the entry box and click on the **Apply** button.

Configuring Selected Batch Output Formats

To configure a selected Batch Output Format, highlight the Batch Output Format in the list box and click on the **Setup** button. This accesses the Setup dialog box for the selected Batch Output Format.

The same Batch Output Format can be selected more than once. This is useful in situations where you want the batch to be output to two different locations using the same output format. However, the setup of the Batch Output Format (specified in the Setup dialog box) must be the same for all instances in the Selected Output Format list.

Including Batch Statistics

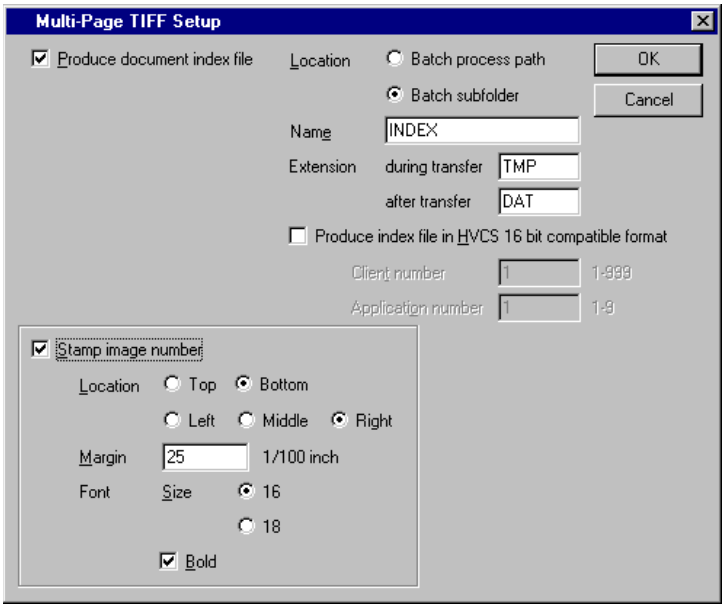
By default, a batch index file containing statistical information about the scanned and processed batch will be saved in the path specified in the Output tab of Application Setup. If you want the batch index file to be output to the root directory for each selected output format, enable the Include Batch Statistics File option. When this option is enabled, the Filename can be made up of one or more batch index fields. In addition, you can specify the File extension of the batch statistics file. By default, the batch statistics file is named <Batch Name>.DAT.

Multi-page TIFF

The Multi-Page TIFF Batch Output Format transfers the entire batch to a single batch subdirectory. The subdirectory name is the batch name and is located under the root path specified in the Output tab. All images of each document in the batch are written to a single multi-page TIFF file. The TIFF file name is the Capture Software document number and is padded with leading zeroes to form an 8-character file name. All files have a “TIF” extension.

When used with a Kodak color scanner, this Batch Output Format creates multi-page TIFF files that can contain both JPG and G4 bi-tonal images. The free Imaging for Windows viewer that is pre-installed in Windows can be used to view these files.

Select the **Setup** button to further define the Multi-Page TIFF Batch Output format.



Produce document index file—by default, Capture Software produces a document index file. The document index file indicates the link between the original Capture Software document number (which also is the name of the multi-page file) and the document index information. By default, it is named INDEX.DAT and is located in the same batch subdirectory as the images. The Name and Extension, however, are configurable. If the Location is defined as the Batch process path, then the document index file is created in the root output path and is named after the batch name. The document index file contains one entry for each document in the batch.

Uncheck **Produce document index file** if you do not want a document index file to be produced when processing a batch.

When producing a document index file, the format of the index file can optionally be produced in HVCS 16-bit (Version 2.x) format. This option can facilitate the upgrade from HVCS 16-bit to Capture Software 32-bit by keeping the batch output produced for the target imaging system unchanged.

The document index file is a semi-colon (;) delimited file that contains one record or line for each document in the batch. Each field in a record is enclosed in double quotes (““). The format is as follows:

[RECORD FORMAT TYPE];[FORMAT VERSION];[DOCUMENT NUMBER];
[# OF IMAGES];[INDEX FIELD 1];[INDEX FIELD 2];...

Record Format Type	Fixed length of four characters. Is always “I04t”.
Format Version	Fixed length of two characters. Initially, is always “01”.
Document Number	Capture Software document number. Fixed length of ten characters, zero-filled. Indicates name of multi-page TIFF file.
# of Images	Number of images in the multi-page file. Fixed length of ten characters, zero-filled.
Index Fields	Index values for the document index fields in the order that they are defined in Index Setup. If an index field does not have a value, then a null character is stored in its place.

The following is an example of an INDEX.DAT file for a batch containing three documents (with four images per document) for an application configured with three document indexes. The second index field is not required and is not provided:

“I04t”;”01”;”0000000001”;”0000000004”;”C12345”;;”12201997”
“I04t”;”01”;”0000000002”;”0000000004”;”B23456”;;”11171996”
“I04t”;”01”;”0000000003”;”0000000004”;”H11122”;;”01091998”

Stamp image number — you can also stamp each image in the multi-page TIFF file with the image sequence number by enabling this option. This image stamp physically modifies the image file and therefore is not an image annotation or bookmark.

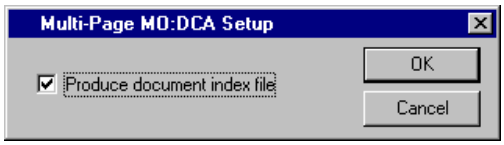
The image sequence number always starts at “1” for each multi-page TIFF document. You can further specify the location of the image sequence number, the margin from the edge of the image, the font size (16 pt or 18 pt only), and whether or not a bold font style will be used.

IMPORTANT: Stamp image number does not work on color images and will actually corrupt color image files.

Multi-page MO:DCA

The Multi-page MO:DCA Batch Output Format transfers the entire batch to a single batch subdirectory. The subdirectory name is the batch name and is located under the root path specified in the Output tab. All images of each document in the batch are written to a single multi-page MO:DCA (Mixed Object Document Content Architecture) file to be used in an IBM ImagePlus imaging system. The MO:DCA file name is the Capture Software document number and is padded with leading zeroes to form an eight-character file name. All files have a “MOD” extension.

A document index file (INDEX.DAT) is also created in the batch subdirectory and provides the link between the original Capture Software document number (which is also the name of the multi-page file) and the document index information (if defined). Select **Setup** in the Application Setup - Output tab to disable or enable the production of a document index file.



The document index file is a semi-colon (;) delimited file that contains one record or line for each document in the batch. Each field in a record is enclosed in double quotes (““). The format is as follows:

[RECORD FORMAT TYPE];[FORMAT VERSION];[DOCUMENT NUMBER];
[# OF IMAGES];[INDEX FIELD 1];[INDEX FIELD 2];...

Record Format Type	Fixed length of four characters. Is always “I04t”.
Format Version	Fixed length of two characters. Initially, is always “01”.
Document Number	Capture Software document number. Fixed length of ten characters, zero-filled. Indicates name of multi-page MO:DCA file.
# of Images	Number of images in the multi-page file. Fixed length of ten characters, zero-filled.
Index Fields	Index values for the document index fields in the order they are defined in Index Setup. If an index field does not have a value, then a null character is stored in its place.

The following is an example of an INDEX.DAT file for a batch containing three documents (with four images per document) for an application configured with three document indexes. The second index field is not required and is not provided:

“I04t”;”01”;”0000000001”;”0000000004”;”C12345”;;”12201997”
“I04t”;”01”;”0000000002”;”0000000004”;”B23456”;;”11171996”
“I04t”;”01”;”0000000003”;”0000000004”;”H11122”;;”01091998”

eiStream WMS RBE

The eiStream WMS RBE (also known as Rapid Batch Entry) Batch Output Format produces a sequential range of either single-page TIFF files (one TIFF file per image) or multi-page TIFF files (one TIFF file per document) per batch. Select the appropriate WMS RBE Batch Output Format to output either single-page or multi-page TIFF files. All TIFF files are contained in one subdirectory with the subdirectory name equal to the Capture Software batch name.

A DDF index file can contain indexes in RBE version 3.1 or version 4 format. The output structure displayed in the Output tab shows the batch structure after Capture Software batch processing.

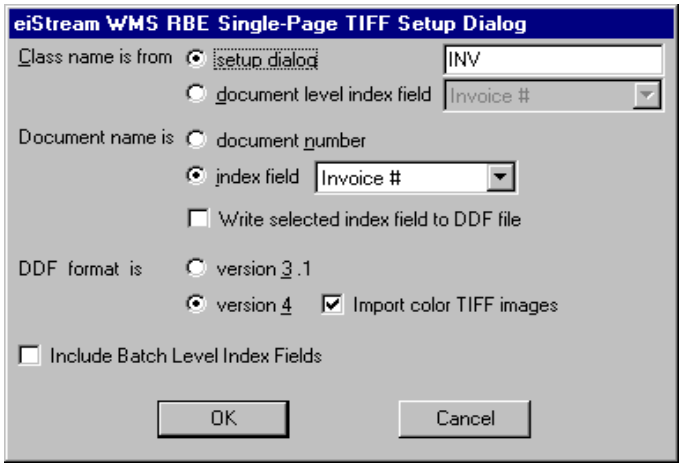
One DDF and SUBMIT.STS file are created per batch. The DDF file name is the same as the Capture Software batch name (BATCH001 in the example batch structure). The images for a document are output as either single-page or multi-page TIFF files and are named starting at 00000001.TIF for the first document and are sequentially incremented across all documents of the batch.

The TIFF file names specified in the DDF file contain only the file name as they are stored in the same batch directory as the DDF file. All document index fields defined for the application, and their corresponding data values, will be written to the DDF file. The label of the index field, as specified in the Document-Index tab, will be the field name in the DDF file. If, for a particular document, a data value is not present for an index field, then the field entry will be omitted from the DDF file.

NOTES: RBE requires that any Date/Time fields be output in mm/dd/yy format.

If the option **Include Batch Level Index Fields** is enabled, then any batch index fields, as defined in Capture Software, and their corresponding data values will be written to each document entry in the DDF file.

The Class name (also known as Document Class) is mandatory and can be specified at either the application or document level. Select **Setup** in the Capture Software Output tab to further define the RBE Batch Output Format. The following dialog box appears.



The **Class name** can either be specified in the setup dialog box or based on a document index field. When specified in the setup dialog box, the class name is indicated once per DDF file. When based on a document index, select the document index field on the drop-down list. The class name is indicated for each document in the DDF file based on the value of the index field for the document.

The **Document name**, as written to the DDF file, can be the Capture Software document number or be based on a document index field. When based on a document index, select the document index field on the drop-down list. The document name for each document, as written to the DDF file, is the value of the document index field for the document.

Since the index field is being used for the document name, by default it will not be written to the DDF file as index data (#DOCIDX or DOCFIELD entry). Check the **Write selected index field to DDF file** box if you want to include the document name index field as index data in the DDF file.

The DDF format can be either version 3.1 (the old format) or version 4 (the new and current format). For version 4, you must enable the **Import Color TIFF images** option if you are scanning with a Kodak color scanner (e.g., i260 Scanner or i840 Scanner) and outputting the images to eiStream WMS.

The following is an example version 3.1 DDF file based on the following assumptions:

- Batch name is BATCH001 and contains three two-page documents.
- Document Class name is INV.
- Document name is the Capture Software document number and the first document name in the batch is 1.
- Field names are Customer number and Invoice #.

```
#REM ---------------------------------------------------------------
#REM Batch created by KODAK DIGITAL SCIENCE Capture Software
#REM Date: '1998:06:15' Time: '10:59:41'
#REM C:\Batches\BATCH001\BATCH001.DDF
#REM ---------------------------------------------------------------
#CLASS|INV

#REM Document 1
#DOCUMENT
#DESC|1
#DOCIDX|Customer number|37865
#DOCIDX|Invoice#|C0009341
#PPATH|00000001.tif
#PPATH|00000002.tif

#REM Document 2
#DOCUMENT
#DESC|2
#DOCIDX|Customer number|78673
#DOCIDX|Invoice#|C0002626
#PPATH|00000003.tif
#PPATH|00000004.tif

#REM Document 3
#DOCUMENT
#DESC|3
#DOCIDX|Customer number|#33351
#DOCIDX|Invoice#|C0008710
#PPATH|00000005.tif
#PPATH|00000006.tif
```

The following is an example version 4 DDF file based on the following assumptions:

- Batch name is BATCH001 and contains three two-page documents.
- Document Class name is INV.
- Document name is based on the index value for the document index field Invoice #. Invoice # is not included as index data in the DDF file.
- Additional field name is Customer number.

```
VERSION|4
REM------------------------------------------------------------
REM Batch created by KODAK DIGITAL SCIENCE Capture Software
REM Date: '1999:04:28' Time: '16:48:25'
REM C:\Batches\Batch001\Batch001.ddf
REM------------------------------------------------------------

CLASS|INV


REM Document C0009341
DOCUMENT
DOCNAME|C0009341
DOCFIELD|Customer number|37865
PAGE|00000001.TIF
PAGE|00000002.TIF

REM Document C0002626
DOCUMENT
DOCNAME|C0002626
DOCFIELD|Customer number|78673
PAGE|00000003.TIF
PAGE|00000004.TIF

REM Document C0008710
DOCUMENT
DOCNAME|C0008710
DOCFIELD|Customer number|33351
PAGE|00000005.TIF
PAGE|00000006.TIF
```

Release

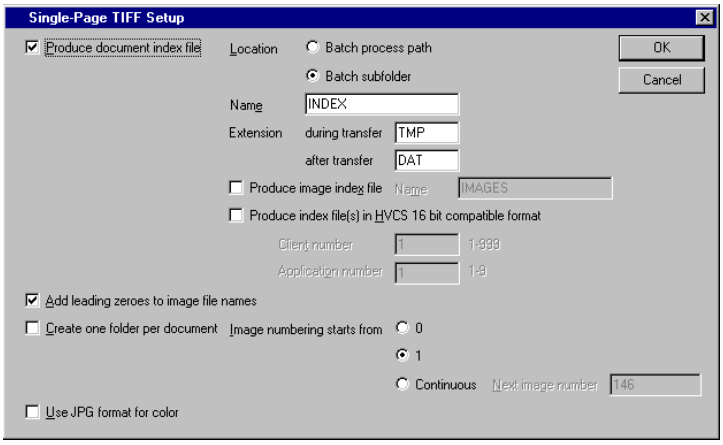
Release is one of the standard Batch Output Formats. Release keeps the batch as is in its Native Scan structure and location and does not perform any conversion on the image files or the document index files. Release will finalize the batch index file and copy it to the specified path. Based on the appearance of the batch index file, the integrator can start or trigger additional batch processing.

Single-page TIFF/JPEG

Single-page TIFF/JPEG is one of the standard Batch Output Formats. This format is intended for integrators and service bureaus that do their own integration of image and index data into target forms processing or document management systems.

During batch processing, Capture Software produces single-page TIFF files, one for each image in the batch. All TIFF files are contained, either directly or in document subfolders, in one batch subdirectory. The subdirectory name is the batch name and is located under the root path specified in the Output tab.

Select the **Setup** button to further define the Single-page TIFF Batch Output Format. The following dialog box appears.



Produce document index file — by default, Capture Software produces a document index file. The document index file indicates the link between the document number, document index information, and the TIFF image files for the document. By default, it is named INDEX.DAT and is located in the same batch subdirectory as the images. The Name and Extension, however, are configurable. If the Location is defined as the Batch process path, then the document index file is created in the root output path and is named after the batch name. The document index file contains one entry for each document in the batch. Its format depends on the **Create one folder per document** setting (see the following page).

Uncheck **Produce document index file** to not produce a document index file when processing a batch.

When producing a document index file, an image index file can optionally be produced. By default, it is named IMAGES.DAT and is located in the same subdirectory as the images. The image index file contains one entry for each image in the batch. Since Capture Software does not yet support page- or image-level indexing, this option may only be useful for High Volume Capture Software (HVCS) users. When you use HVCS with a Scanner 5500, Scanner 7500, or Scanner 9500 installed with the Bar Code Accessory, the image index file will contain image address and bar code information for each image scanned.

When producing a document index file, and optionally an image index file, the format of the index files can optionally be produced in HVCS 16-bit (Version 2.x) format. This option can facilitate the upgrade from HVCS 16-bit to Capture Software 32-bit by keeping the batch output produced for the target imaging system unchanged.

Add leading zeroes to image file names — when enabled, Capture Software produces TIFF image files with eight-character names, padded with leading zeroes. Otherwise, image file names are sequentially numbered without leading zeroes. By default, adding leading zeroes is enabled. For example:

Add Leading Zeroes	**Image File Name**
Enabled	00000001.TIF 00000002.TIF 00000003.TIF . . .
Disabled	1.TIF 2.TIF 3.TIF . . .

Create one folder per document — when enabled, Capture Software produces a subdirectory of TIFF image files for each document in the batch. The name of the subdirectory will be the Capture Software document number. If document numbers are incremented across batches, then the document subdirectory names are also incremented across batches. If **Add leading zeroes to image file names** is enabled, then the document subdirectory names will also be padded with leading zeroes. The image file names in the document subdirectory always start at 00000001.TIF (or 1.TIF) and are sequentially incremented.

When disabled, Capture Software produces a sequential range of single-page TIFF files per batch in the batch subdirectory. The document index file indicates the starting and ending image numbers for each document. The starting image sequence number for the processed batch depends on the **Image numbering starts from** setting. This setting is available only when document folders are disabled. The starting image sequence can be between 0 or 1 or can be incremented across batches. The default is a starting image number of 1.

Use JPG format for color— when used with a Kodak color scanner, color images will be saved as JPEG files and bi-tonal images will be saved as TIFF G4 images. For example, if you scan Documents 1 and 2, each containing four images with color fronts and bi-tonal rear sides, this batch will be produced:

BATCHES\BATCH001\00000001\00000001.JPG
BATCHES\BATCH001\00000001\00000002.TIF
BATCHES\BATCH001\00000001\00000003.JPG
BATCHES\BATCH001\00000001\00000004.TIF
BATCHES\BATCH001\00000002\00000001.JPG
BATCHES\BATCH001\00000002\00000002.TIF
BATCHES\BATCH001\00000002\00000003.JPG
BATCHES\BATCH001\00000002\00000004.TIF

If this option is not checked, any color images will be saved as TIFF files with JPEG compression. The free Imaging for Windows viewer that is pre-installed in Windows can be used to view these files.

Document index file format

The document index file (INDEX.DAT by default) is a semicolon(;) delimited file that contains one record or line for each document in the batch. Each field is enclosed in double quotes (“). Its format depends on the **Create one folder per document** setting.

When **Create one folder per document** is enabled, INDEX.DAT has the following format:

[RECORD FORMAT TYPE]; [FORMAT VERSION]; [DOCUMENT NUMBER]; [INDEX FIELD 1]; [INDEX FIELD 2];….

Record Format Type	Fixed length of four characters. Is always “I05u”.
Format Version	Fixed length of two characters. Is always “01”.
Document Number	Capture Software document number. Fixed length of ten characters, zero-filled. Indicates name of document folder.
Index Fields	Index values for the document index fields in the order they are defined in Index Setup. If an index field does not have a value, then a null character will be stored in its place.

Following is an example of an INDEX.DAT file for a batch containing three documents for an application configured with three document indexes. The second index field is not required and is not provided.

“I05u”;”01”;”0000000001”;”C12345”;;”12201997”
“I05u”;”01”;”0000000002”;”B23456”;;”11171996”
“I05u”;”01”;”0000000003”;”H11122”;;”01091998”

When **Create one folder per document** is disabled, INDEX.DAT has the following format:

[RECORD FORMAT TYPE]; [FORMAT VERSION]; [DOCUMENT NUMBER]; [STARTING IMAGE NUMBER]; [ENDING IMAGE NUMBER]; [INDEX FIELD 1]; [INDEX FIELD 2];….

Record Format Type	Fixed length of four characters. Is always “I02r”.
Format Version	Fixed length of two characters. Initially, is always “01”.
Document Number	Capture Software document number. Fixed length of ten characters, zero-filled.
Starting Image Number	TIFF file image number of the first image of the document. Fixed length of ten characters, zero-filled.
Ending Image Number	TIFF file image number of the last image of the document. Fixed length of ten characters, zero-filled.
Index Fields	Index values for the document index fields in the order they are defined in Index Setup If an index field does not have a value, then a null character will be stored in its place.

The following is an example of an INDEX.DAT file for a batch containing three documents (with four images per document) for an application configured with three document indexes. The second index field is not required and is not provided.

“I02r”;”01”;”0000000001”;” 0000000001”;” 0000000004”;”C12345”;;”12201997”
“I02r”;”01”;”0000000002”;” 0000000005”;” 0000000008”;”B23456”;;”11171996”
“I02r”;”01”;”0000000003”;” 0000000009”;” 0000000012”;”H11122”;;”01091998”

List of Batch Output Formats

Capture Software will continue to include additional Batch Output Formats, compatible with other digital document management systems, as they become available. On the Capture Software CD, these Batch Output Formats are available:

- AXXIS (Automated Office Systems)
- Captiva Formware
- Digital Signature (for TIFF image output)
- Document CD (with CDVue application—B&W only)
- Document CD for Find and View (with Find and View application—B&W and color)
- Document Express with DjVu (Lizard Tech)
- DocuWare (ALOS)
- Doc-X Import (Minolta MI^{3}MS 3000)
- EasyWare
- eiStream WMS RBE (Single and Multi-page TIFF)
- eMedia Filter (Optika)
- Enhanced Multi-Page Document (file naming based on index value[s]; TIFF or PDF output)
- Enhanced Single Image (image [TIFF/JPEG/PDF] file naming based on index data)
- Fast Release with Index
- File Magic Plus/Fortis
- FilePower (Optika)
- High Performance Image Import (FileNet)
- IMR Alchemy
- IRIS Docshare
- IRISPdf
- iVault! (JP Morgan Chase)
- JPEG TIFF7 (alternate color TIFF format)
- Keyfile
- Kofax Ascent
- KoVIS IBS/PCPlus (eiStream)
- LaserFiche
- Legato (OTG—Application Xtender)
- LuraDocument JPM/PDF (LuraTech)
- MacroImage Preloaded Indexes (MacroSoft)
- MetaFile
- Mobius
- MO:DCA (for IBM ImagePlus systems)
- Multiple Batch Output Formats (output to more than one format with one processing step)
- Multi-page TIFF
- Multi-page TIFF 300 DPI Conversion (downscale 300 dpi bi-tonal images to either 240 or 200 dpi)
- OnBase (Hyland Software)

- PaperVision (Digitech)
- PC DOCS
- PDF (Multi-page image PDF)
- Post-Scanning Rotation
- Post-Scanning Split
- Scan to Email
- Silas Reveille for *Kodak* Capture Software
- Single-page TIFF (or JPEG)
- Single-page TIFF 300 DPI Conversion (downscale 300 dpi bi-tonal images to either 240 or 200 dpi)
- Stitch Long Paper (for i280 Long Paper Scanning)
- Uncompress images (output decompressed images; one TIFF per image)
- Unisys e-Workflow and Imaging

Contact your local Kodak office or authorized reseller of Kodak Imaging Products for an updated list of Batch Output Formats or visit our web site at www.kodak.com/go/capturesoftware.

5 Patch Setup

About patch codes

There are three types of patch codes you can set up in Capture Software:

- Patch 2 codes are traditionally used to separate pages into documents. A page containing a Patch 2 code is usually kept.
- Patch 3 codes are traditionally used to separate documents into batches. A page containing a Patch 3 code is not kept.
- Patch T codes or programmable patch codes can be used for either document, batch separation or the creation of an attachment. A Patch T code is never kept.

With Capture Software, you can define the separation method for each of the patch codes. This is useful for existing applications where Patch 2 codes were used as document separator pages instead of Patch T codes. You can also define a patch code to create an attachment. For new applications and for compatibility reasons, it is recommended that you use patch codes the way they were designed to be used.

NOTES: Patch code applications cannot be used with Capture Software Lite .

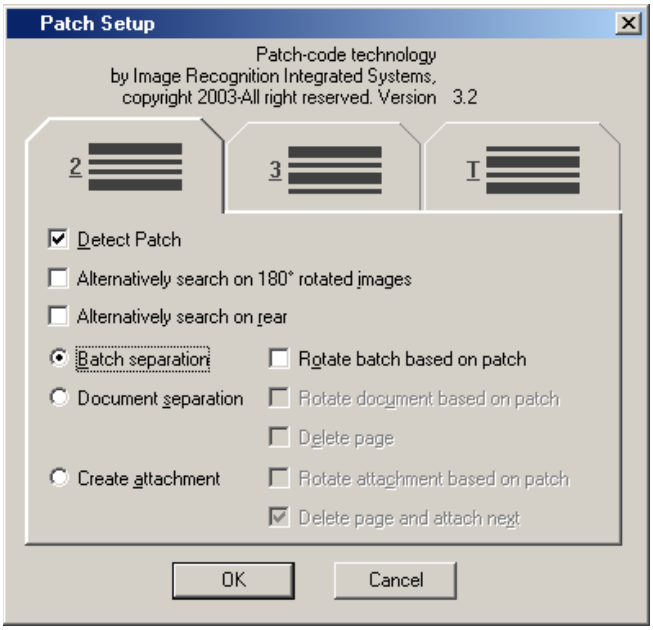
For patch code reading when color or grayscale scanning, refer to Chapter 7, *Bar Codes, Patch Codes and OCR Indexing with Color Scanners*.

When patch code reading is enabled in an i800 Series Scanner, software patch code reading in Capture Software is not allowed. Conversely, when software patch code reading is enabled in Capture Software, hardware patch code reading in the i800 Series Scanner may not be defined.

Using the Patch Setup dialog box

To access the Patch Setup dialog box:

1. From the Capture Software main window, select the application for which you want to set up patch information.
2. Access the Application Setup dialog box.
3. Select the Setup Patch icon located in the upper right corner of the window. The Patch Setup dialog box appears.



4. Select the tab(s) with the patch type(s) you want to define: Patch 2, Patch 3, or Patch T.
5. Enable all desired options on the tab. (See the following explanations of each option on the Patch tabs.)
6. Click **OK**.

Patch Setup dialog box

Detecting patch code options

Following is an explanation of each option available in the Patch Setup dialog box. The options described are available on all of the patch tabs.

Detect Patch — you can enable or disable the **Detect Patch** check box. If all **Detect Patch** check boxes are disabled, the Patch Reader is disabled. If you have checked **Detect Patch** on any of the patch tabs, Capture Software will check each page for the type of patch code you are looking for.

IMPORTANT: Patch codes will always be searched in the first four inches (10 cm) of the top of the image after rotation, deskew, and cropping (if any). If a patch is vertical, the image should be rotated with the auto-rotate option defined in the Page Setup.

Each patch code type can be defined to: start a **new batch,** start a **new document** or **create an attachment.**

Alternatively search on 180° rotated images — when enabled and patch code reading is unsuccessful, Capture Software also looks for a patch code after rotating the image 180°. This slows down patch code reading but prevents a patch code read failure because a page was scanned upside down.

Alternatively search on rear — when enabled and patch code reading is unsuccessful, Capture Software also searches for the patch code on the rear side of the document. When Capture Software detects a patch code on the front, it will not try to detect a patch code on the rear.

Batch separation options

Batch separation — to create a new batch with a patch code, enable the **Batch separation** option for the patch code type that you will use for that application.

By default:

- Patch 3 creates a new batch.
- Patch 2 creates a new document and keeps the image of the page containing the patch code.
- Patch T creates a new document and deletes the image of the page containing the patch code.

IMPORTANT: Normally the page containing a patch code for batch separation should not have any content. Therefore, the page containing the patch code that creates the new batch is not kept and the next page scanned becomes the first page of the first document in the batch.

Rotate batch based on patch — rotates the page containing the patch code so the patch code is located horizontally on top of the page. All the pages in the batch will be rotated. This only works when the **Alternatively search on 180° rotated images** option is enabled. Fronts and rears are rotated according to the selected duplex mode (classic or calendar).

NOTE: This function is not yet supported in Capture Software.

Document separation options

Document separation — to create a new document with a patch code, enable the **Document separation** option for the patch type you are going to use.

Rotate document based on patch — rotates the image containing the patch code so the patch code is located horizontally on top of the page. All the images in the document will be rotated. This only works when the **Alternatively search on 180° rotated images** option is enabled. Fronts and rears are rotated according to the selected duplex mode (classic or calendar).

NOTE: **Rotate document based on patch** does not work when the patch code separator page is deleted.

Delete page — deletes the page containing the patch code that started the new document. This is important when inserts are used for document separation purposes but do not contain any other information.

Create attachment options

Create attachment — to create an attachment with a patch code, enable the **Create attachment** option for the patch code type you want to use in your application.

NOTE: Use this option in conjunction with the option **Create a document every X pages** in the Application Setup>Images Tab – Document Tab.

Rotate page based on patch code — rotates the attachment (both front and rear) so the patch code is horizontally on top of the page. This only works when the **Alternatively search on 180° rotated images** option is enabled. Fronts and rears are rotated according to the selected duplex mode (classic or calendar).

Delete page and attach next — deletes the page containing the patch code and attaches the next page to the document. This is important when a patch card is inserted just before the attachment. This patch card only indicates the next page is an attachment. Any rotation applies to the next page.

IMPORTANT: The Create attachment option is only valid for one page (both front and rear). Therefore, you have to apply a patch code to every attachment or insert a patch card before every attachment.

6 Bar Code/OCR Setup

Use Bar Code/OCR Setup to set up the bar code reader for one or more bar codes or OCR indexing parameters for one or more OCR zones.

Bar code setup allows you to define:

- the name of the bar code
- the data mask or syntax
- the physical location where you find the bar code (zone or anywhere on the image)
- the bar code type (width, height, quality, and confidence level)
- the level where you can find the bar code (batch, document, or page level)

OCR indexing setup allows you to define:

- the name of the OCR zone
- the physical location where you find the text (zone location on the image)
- the level where you can find the text (batch or document level)

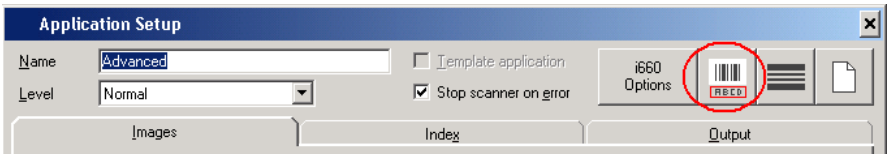
NOTES: Bar code or OCR indexing applications cannot be used with Capture Software Lite.

For bar code or OCR reading when color or grayscale scanning, refer to Chapter 7, *Bar Codes, Patch Codes, and OCR Indexing with Color Scanners*.

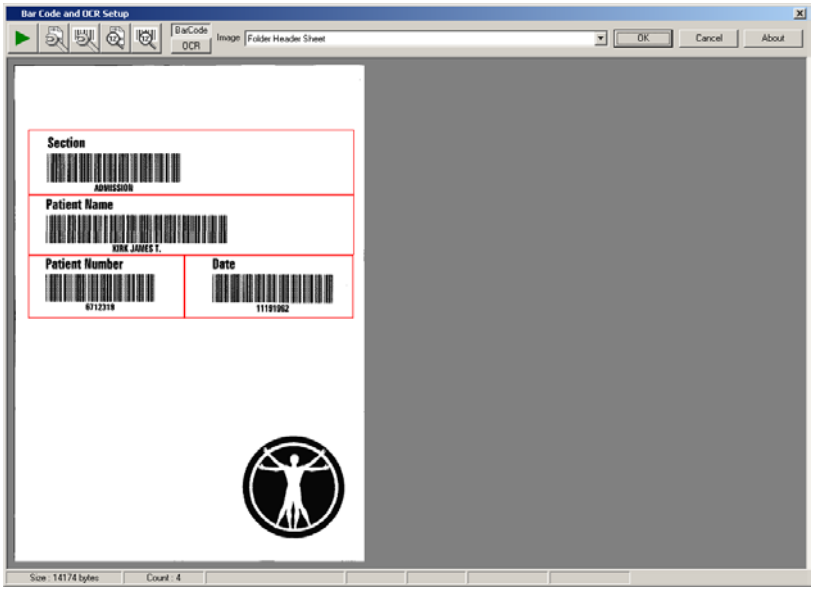
Bar Code/OCR Setup window for bar codes and OCR

To access the Bar Code/OCR Setup window for specifying bar codes or OCR zones:

1. From the Capture Software main window, select the application for which you want to set bar code/OCR information.
2. Access the Application Setup dialog box.
3. Click the **Bar Code/OCR Setup** button.



The Bar Code and OCR Setup window appears.



The Bar Code and OCR Setup window allows you to scan an image and define general OCR indexing or bar code properties for all defined bar codes/OCR zones and bar code/OCR zone-specific properties. You must have an image in the Image drop-down list before bar code/OCR zones can be defined.

The example Bar Code and OCR Setup window shows the Folder Header Sheet image with four bar code zones defined.

Image drop-down list — displays all images that have been scanned into or copied to Bar Code and OCR Setup for the application. For typical bar code/OCR applications, a single image is all that is required. Multiple images are needed for applications that have batch and document header sheets each containing bar code/OCR information. All bar code/OCR zones defined are displayed on the current image, even those zones that were defined using another image.

OK — accepts any changes made on the Bar Code and OCR Setup window and returns you to the Application Setup window.

NOTE: When you click **OK** on the Bar Code and OCR Setup window, your changes are temporarily saved. You must click **OK** on the Application Setup window to permanently save Bar Code and OCR Setup changes.

Cancel — closes the Bar Code and OCR Setup window, discards any changes made, and returns you to the Application Setup window.

About — displays the version information for the Capture Software bar code and OCR reader.

Bar Code and OCR Setup Tool bar

Following is a description of the tools available on the Bar Code and OCR Setup Tool bar and the functions they perform.

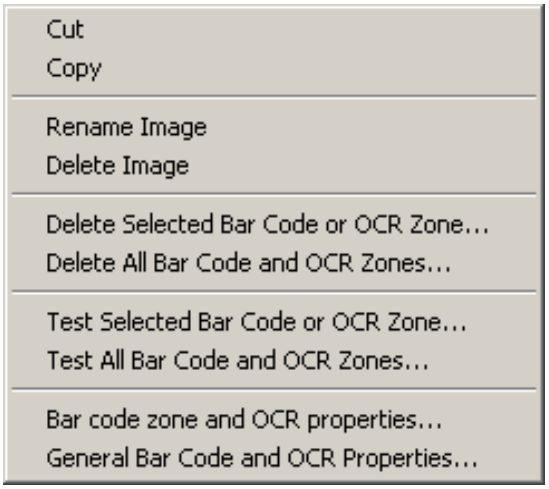
Button	Description
	Scan — scans the front side of a single image. When you select the Scan button, the Scan Image dialog box appears.
	General Bar Code and OCR Properties — defines application-level properties that will apply to all bar code/OCR zones defined. When you select this button, the General Bar Code and OCR Properties dialog box appears.
	Bar Code Zone and OCR Properties — defines the properties for the currently selected bar code/OCR zone. When you select this button with a bar code zone specified, the Bar Code Zone Properties dialog box appears; when an OCR zone is specified, the OCR Zone Properties dialog box appears.
	Test All Bar Code Zones — attempts to read all bar code/ OCR zones defined for a bar code/OCR text value. If any bar codes are found, the Bar Code and OCR Values window appears.
	Test Selected Bar Code Zone — attempts to read the selected bar code/OCR zone for a value. If the bar code/OCR text is read successfully, the Bar Code and OCR Values window appears. If a bar code/OCR text value is not found, the Bar Code and OCR Values window will only show the zone label and coordinates. In this case, the bar code/OCR zone properties must be adjusted.
	Bar Code — defines a bar code. **OCR** — specifies an OCR zone.

Image context-sensitive menu

When you right-click on an image in Bar Code and OCR Setup, a context-sensitive menu appears. If no bar code or OCR zones are selected, the following menu appears.

Rename Image
Delete Image
Delete All Bar Code and OCR Zones...
Test All Bar Code and OCR Zones...
General Bar Code and OCR Properties...

When a bar code or OCR zone is selected, the menu includes more options.


Cut
Copy
Rename Image
Delete Image
Delete Selected Bar Code or OCR Zone...
Delete All Bar Code and OCR Zones...
Test Selected Bar Code or OCR Zone...
Test All Bar Code and OCR Zones...
Bar code zone and OCR properties...
General Bar Code and OCR Properties...

Following are descriptions of each menu option:

Cut — removes the selected bar code/OCR zone definition for subsequent pasting onto another image using bar codes or OCR indexing. If a bar code or OCR zone needs to be moved to another location on the same image, you can left-click and drag the zone to its new location without cutting and pasting the zone.

Copy — copies the selected bar code/OCR zone definition for subsequent pasting onto another image using bar codes or OCR indexing. Copy is also useful when several bar code/OCR zones of the exact same properties (except for location) are required. After defining the first zone, you can use the **Copy** and **Paste** function to duplicate zone definitions. Once defined, the new zones can be moved by left-clicking on the zone and dragging it to its proper location.

Paste — pastes a cut or copied bar code/OCR zone definition to the current image. When pasting, the zone coordinates from the saved zone are used in determining the location of the zone. If the pasted zone is in the wrong location, you can left-click on the zone and move it to its proper location. **Paste** is useful in conjunction with **Copy** when copying bar code zone properties to another image containing bar codes in the application.

Rename Image — prompts you to rename the currently displayed image. When naming or renaming an image, the image name must be unique to the Capture Software application. A file extension is not required.

NOTE: Special characters such as **: “ ? * . < > \ /** are not allowed in the image name.

Delete Image — removes the current image from the Bar Code and OCR Setup image list for the application. You will be prompted for confirmation before the deletion takes place. If other images remain in the image list, then the image preceding the deleted image will be displayed in its place. Bar code/OCR zone definitions are not affected.

IMPORTANT: If the image to be deleted is the last image in the image list, the following message will appear: ***This is the last image. Deleting this image also deletes all bar code definitions. Do you want to delete this image?*** *If you choose* ***Yes****, all bar code/OCR zone definitions for the application will also be deleted. Remember, an image must exist in the image list in order to define bar code/OCR zones. As a result, if there are no more images in the image list, then all bar code/OCR zone definitions will be deleted.*

Delete Selected Bar Code or OCR Zone — deletes the selected bar code/OCR zone definition. No warning or confirmation message will appear.

Delete All Bar Code and OCR Zones — deletes all bar code/OCR zone definitions for the application. A confirmation box appears before the deletion takes place.

Test Selected Bar Code or OCR Zone—attempts to read the selected bar code zone for a bar code/OCR text value. If a value is found, the Bar Code and OCR Values window will appear.

Test All Bar Code and OCR Zones — attempts to read all bar code/OCR zones defined for a bar code/OCR text value. If any bar codes are found, the Bar Code and OCR Values window appears.

Bar Code Zone and OCR Properties — allows you to define the properties for the currently selected bar code/OCR zone. When you select this button, the Bar Code Zone Properties or OCR Zone Properties dialog box appears.

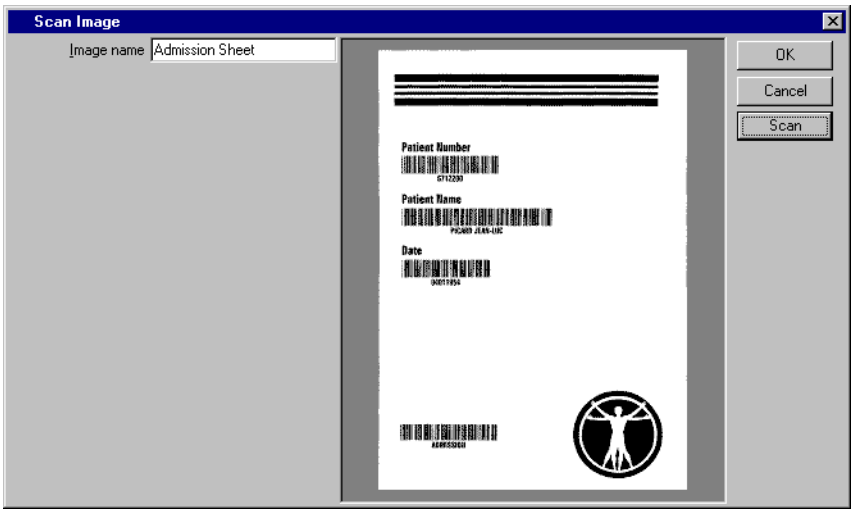
General Bar Code and OCR Properties — allows you define application-level properties that will apply to all bar code/OCR zones defined. When you select this button, the General Bar Code and OCR Properties dialog box appears.

Scanning an image

An image must be in the Image drop-down list before bar code or OCR zones can be defined. There are two ways to capture images for bar code or OCR setup.

To scan an image from the Bar Code and OCR Setup window:

1. Select the green **Scan** button. The Scan Image window appears.



2. Position the original in the feeder and click on the **Scan** button. The image appears in the Scan Image window.

   Scan the image as straight as possible. The scanner uses the parameters of the current Capture Software Page template. Any auto-rotation, auto-cropping and deskew settings from the current Capture Software Page Template will also be applied to the scanned image before it appears.

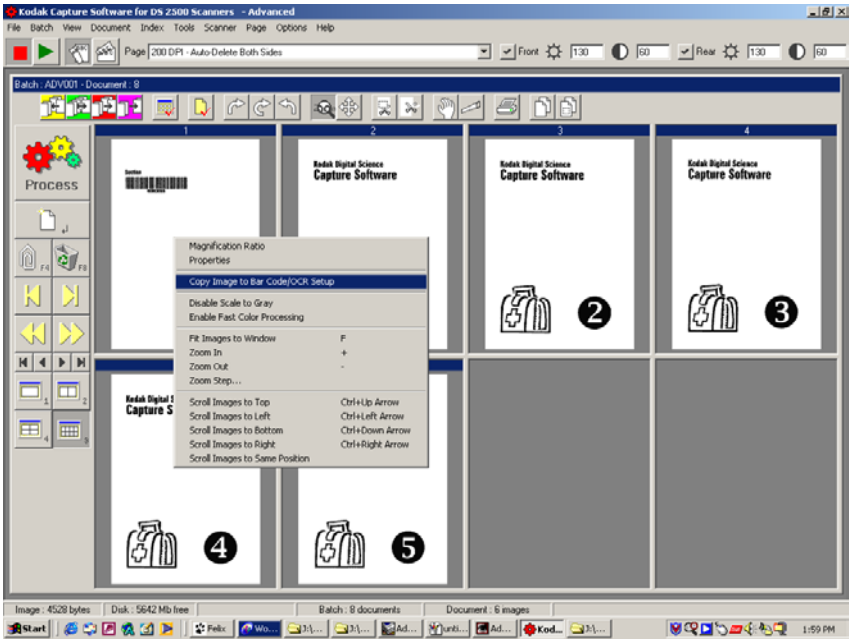
3. If the image you scanned is acceptable, enter a name in the Image Name field. The image name should not contain the following special characters: **: “ ? * . < > \ /**

4. Click **OK**.

You can also scan an image from the Capture Software main window.

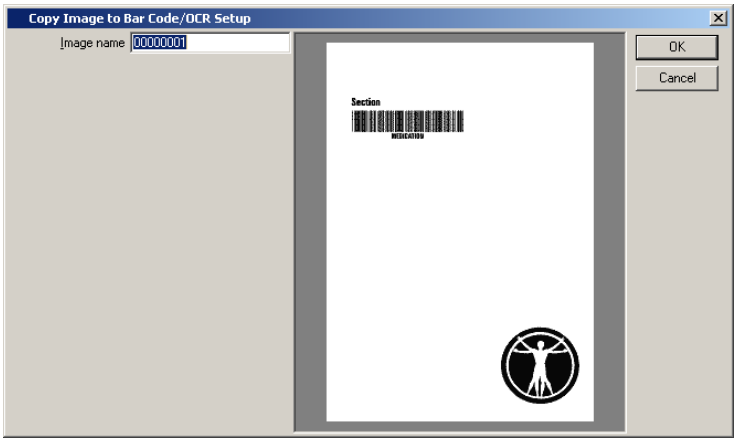
1. Select the image containing bar codes/OCR text and click the right mouse button.

   The Image context-sensitive menu appears.



2. Select the **Copy Image to Bar Code/OCR Setup** option.

   The Copy Image to Bar Code/OCR Setup window appears.



3. Enter the new image name.
4. Click **OK**.

Drawing and selecting bar code zones

Bar code zones are drawn in the Bar Code and OCR Setup window. Once you define a bar code zone, you can set up the bar code properties. See the following section for defining bar code zone properties.

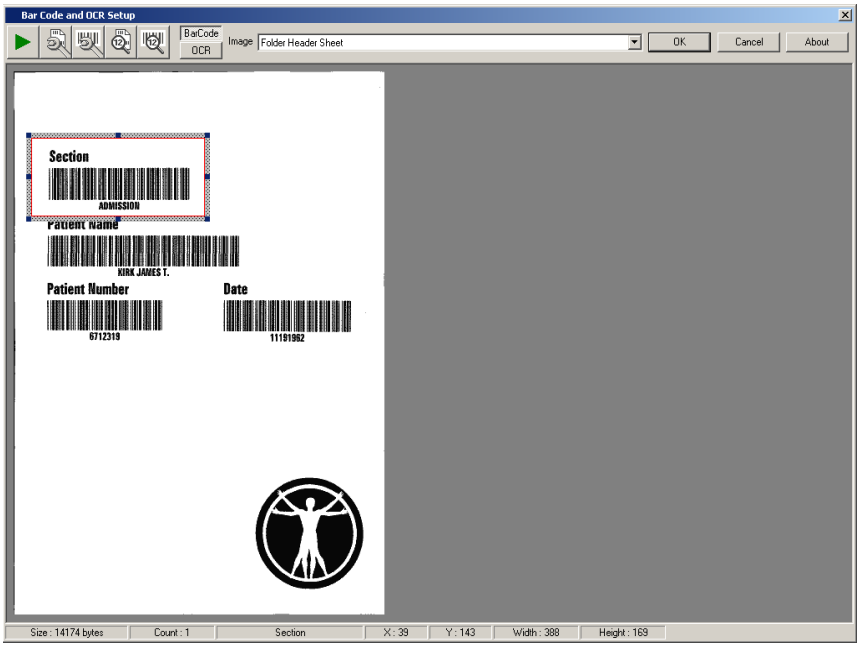
To draw a bar code zone:

1. Select the **Bar Code** button in the Bar Code and OCR Setup Tool bar.
2. Place the mouse cursor at the top left corner of the area of the displayed image where you want to define the bar code zone.

   It is recommended that you draw the zone about a ¼-inch larger on all sides than the actual bar code. This ¼-inch around the bar code is often necessary for successful bar code reading. Bar code zones can overlap.

NOTE: Bar code zones are application-specific; not image-specific. Therefore, displaying a new image will continue to display the zones as defined.

3. Click the left mouse button and drag the cursor until a rectangle is drawn around the area of the bar code.



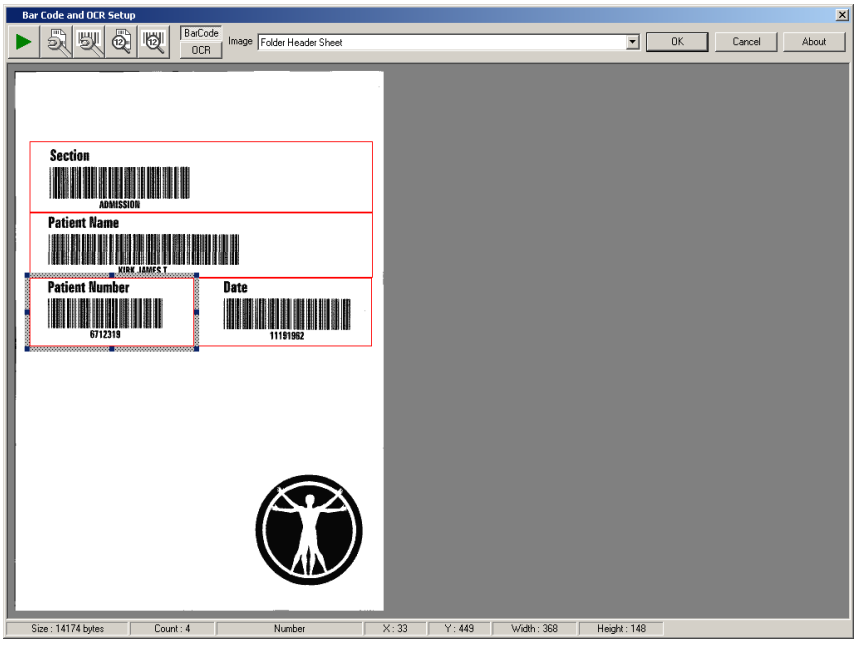
- Bar codes defined with Zone will be enclosed in a red box.
- Bar codes defined with Anywhere will be enclosed in a blue box.

As the rectangle is drawn, the x and y coordinates and width and height are displayed (in 1/100 in.) in the status bar at the bottom of the screen.

You can delete or change the properties of a bar code zone.

To delete a bar code zone:

1. Select the bar code zone you want to delete by clicking the left mouse button on the zone you want to delete. The zone is highlighted.



2. Press the **Delete** key or choose **Cut** or **Delete Selected Bar Code Zone** from the Image context-sensitive menu. The zone is deleted.

To edit or change a bar code zone:

1. Select the bar code zone you want to edit.
2. Press the **Bar Code Zone and OCR Properties** button or choose **Bar Code Zone and OCR Properties** from the Image context-sensitive menu.

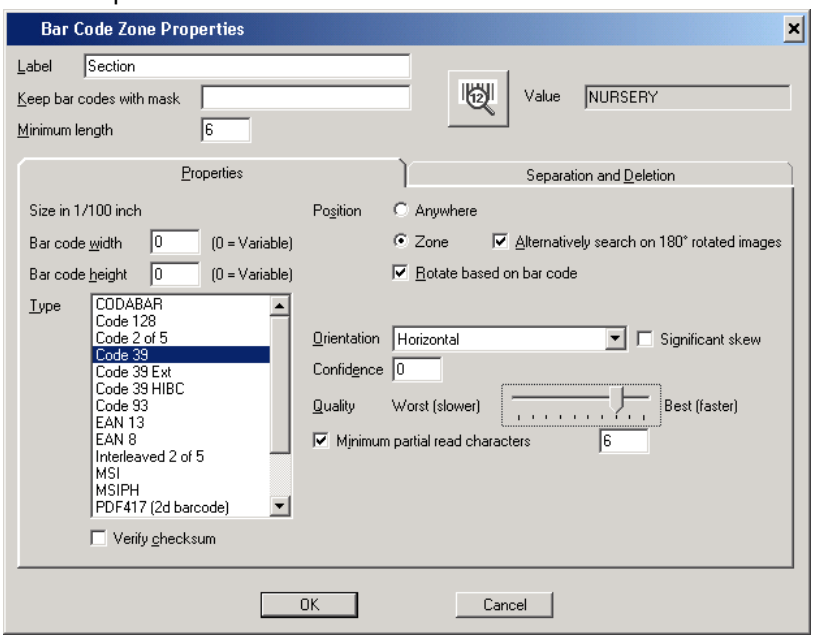
Bar Code and OCR Setup status bar for bar code zones

The Bar Code and OCR Setup status bar for bar code zones contains the following information:

- Size of currently displayed image
- Count of all zones (bar code and OCR) defined
- Label of currently selected bar code zone
- x and y starting position (in 1/100-in.) of currently selected bar code zone
- Width and height (in 1/00-in.) of currently selected bar code zone

Setting bar code zone properties

Bar code zones provide Capture Software with important information, such as dimensions of the bar code and the bar code type. After you draw a bar code zone, Capture Software attempts to read the bar code in the zone and automatically displays the Bar Code Zone Properties window with whatever values Capture Software could determine about the bar code.



When the Bar Code Zone Properties window is displayed, follow the procedures below to further define bar code zone properties:

1. Enter a name for the bar code zone in the **Label** field.

   This name identifies the bar code and appears in Index setup as BC_[Label] in the list of default values. To assign a bar code value to an index field, refer to “Index setup tab — Default values” in Chapter 4.

IMPORTANT: The bar code Label does not define or identify an Capture Software Index field. In Application Setup, all index fields must be defined in the Index tab. To use a bar code for an index field, you must assign the appropriate BC_[Label] as a default value for the index field.

2. If applicable, enter a mask value in the **Keep bar codes with mask** field.

   The Keep bar codes with mask option should be used when one or more *Anywhere* bar code zones are defined. The bar code value is only retained for the defined zone when it complies with the mask specified in the Keep bar codes with mask field. This ensures that the bar code values read on a page get assigned to the correct bar code zone.

   This option is also useful when more than one *Zone* bar code zones are in the same physical location on a page but have different values and meanings (e.g., a zone defined for a batch header sheet versus a zone defined for a document header sheet). To comply with a specified mask, each character of the bar code value must match the mask syntax for that character's position in the mask.

   For example, a mask of **A(8)** will retain a bar code value of up to, but not exceeding, eight alphabetic characters:

Bar Code Value	**Retained?**
SURGERY	Yes
ADMISSION	No

   See the "Mask syntax" section in Chapter 4 for mask syntax values.

3. Enter the minimum length of the bar code.

   By default, the minimum length is set to the length of the tested bar code value. If a value is not found or the value is equal to or greater than six characters, the default will be set to "6." It is recommended that the Minimum length parameter be set at 6 characters or fewer to allow Capture Software to retain bar code values in cases of a partial read.

   NOTE: If Partial Reading is not required or enabled, then the mask and minimum length settings can be used in combination to restrict even further the bar code values that are retained. For example:

   Mask **9(10)**
   Minimum bytes **6**
   retains bar code values between six and ten digits, while

   Mask **9(10)**
   Minimum length **10**
   retains bar code values only if they are exactly ten digits.

Using the Properties tab

The Bar Code Zone Properties window provides a Properties tab and a Separation and Deletion tab. The Properties tab allows you to specify size and quality characteristics of the bar code as well as the position of the bar code.

To define those characteristics fill out the Properties tab as described below:

1. If the bar code has a fixed width or height, enter these values in the **Bar code width** and **Bar code height** fields. Enter the width and height in 1/100 of an inch.

   Making an entry in one or both of these fields increases the performance of bar code reading. If one of the dimensions is variable, enter **0**. The default bar code width and height is "0."

   NOTES: Bar code dimensions can vary depending on the amount of skew. Therefore, it is recommended that you enter these values only when you are sure of the dimensions of the bar code.

   You must specify a Bar code height for bar codes that are smaller than 40 pixels high (e.g., at 200 dpi, 40 pixels is 20/100 in.).

   When specifying a bar code height and/or width, the tolerance is ±10% (e.g., if you specify 20/100 for the bar code height, any bar code between 18/100 and 22/100 in. will be detected).

2. Set one of the following **Position** options:

- **Anywhere** — select this option if the bar code can appear anywhere on the image. This often occurs when bar code labels are used on documents. When drawing a zone around the bar code, draw it precisely around one bar code label somewhere on the page, and select the **Anywhere** option.

NOTE: When looking for Anywhere bar codes, Capture Software searches the image from top to bottom for horizontal and vertical bar codes. This search order is important to understand if you have more than one Anywhere bar code on a page.

- **Zone** — if a bar code is always in the same position, enable the **Zone** option. This increases bar code reading performance. The Zone option is the default.
  - **Alternatively search on 180° rotated images** — this option can only be used when the Zone option is enabled. When bar code reading is unsuccessful, Capture Software will also look for the zone after rotating an image 180 degrees. This slows down bar code reading, but prevents a bar code read failure because a page was scanned upside down. The image is not permanently rotated unless the **Rotate based on bar code** option is selected.
  - **Rotate based on bar code** — this option rotates either the document or attachment in the same orientation as the orientation of the bar code depending on the level (document or attachment) selected in the Separation and Deletion tab. For document rotation, all of the pages of the document will be rotated in the same manner as the lead page containing the bar code zone. If required, only one bar code zone should have the **Rotate based on bar code** option enabled.

    Capture Software can determine if a bar code is rotated 180 degrees and will rotate the bar code page 180° to display it in the correct orientation.

NOTE: Batch rotation is not supported in Capture Software.

3. Select one or more bar code types from the **Type** list box.

   Although it is unusual that more than one bar code type would be found within a zone, or even an application, it is possible to select different bar code types. Following is a list of bar code types and any selection restrictions if they apply.

   - CODABAR
   - Code 128
   - Code 2 of 5 (Mutually exclusive with Interleaved 2 of 5. Do not select them simultaneously.)
   - Code 39

   NOTE: The maximum number of characters that can be read with the Code 39 bar code is 38.

   - Code 39 Extended
   - Code 39 HIBC
   - Code 93
   - EAN 13
   - EAN 8
   - Interleaved 2 of 5 (Mutually exclusive with Code 2 of 5. Do not select them simultaneously.)
   - MSI
   - MSIPH
   - PDF417 — is a high-density, two-dimensional bar code type that can contain up to 1250 bytes of information in a few square inches. With this kind of density, all of the index data for a document can be contained in a single bar code. Refer to the section entitled “Substring syntax” in Chapter 4 for suggestions on creating and indexing PDF417 bar codes in Capture Software.
   - PostNet (Postal)—cannot be selected in combination with any other bar code type.
   - UCC128
   - UPC-A
   - UPC-E

NOTE: The more bar code types you select, the slower performance will be. After you confirm the bar code zone setup by clicking **OK**, an audit will be performed for any bar code type conflicts.

When the bar code zone is first created, Capture Software searches the zone for all bar code types. When successful, Capture Software sets the bar code type to the one found. Otherwise, a bar code type is not selected.

There are two exceptions to this rule:

- For Code 39 Extended and Code 39 HIBC bar codes, Capture Software may set the bar code type to Code 39. As a result, you may need to manually select Code 39 Extended and Code 39 HIBC.
- For MSIPH bar codes, Capture Software may set the bar code type to MSI. As a result, you may need to manually select MSIPH.

4. Check **Verify Checksum** if the bar code contains a checksum character.

   Checksum characters help ensure the accuracy of bar code reading. Not all bar code types support checksum verification. Bar code types that optionally support checksum verification:

   - Code 3 of 9
   - CODABAR
   - Interleaved 2 of 5

   Some bar code types like PDF417, UPC and EAN have a built-in checksum routine that cannot be disabled.

   If you disable **Verify Checksum** for bar codes containing a checksum, the checksum value (usually the last character of the bar code) will appear in the bar code value; otherwise, the check digit will remain hidden.

   If checksum verification fails during scanning, a bar code value is not generated, causing Capture Software index field audits to fail.

5. Choose one of the following **Orientation** options:

   - Horizontal
   - Vertical
   - Horizontal & Vertical
   - Horizontal then Vertical
   - Vertical then Horizontal

   NOTES:

   - If your bar codes are all in the same orientation (i.e., all horizontal or all vertical), it is recommended that you indicate the specific orientation; this will increase bar code read performance.
   - If your bar codes are predominantly in the same orientation (e.g., horizontal) but may have an occasional bar code in the opposite direction (e.g., vertical) it is recommended to use the appropriate “then” orientation (e.g., Horizontal **then** Vertical). This will improve bar code reading performance for these types of bar code applications.

   When the bar code zone is first created, Capture Software automatically sets the orientation to the orientation of the bar code, if found. Otherwise, **Horizontal** is selected by default.

6. Enable **Significant Skew** if there is a possibility that bar codes could be skewed on a page.

   Significant Skew means more than 15 degrees of skew; enabling this option slows down the reading process. The following shows a 15° skewed bar code that still reads successfully without enabling the *with Significant Skew* option.

   If enabled in Page Setup, Capture Software will deskew the image before reading the bar codes. Therefore, Significant Skew should never be used with pre-printed bar codes, but could be used for bar code labels.

7. Enter a **Confidence** level when you want to restrict what Capture Software considers to be a successful bar code read.

   When reading a bar code, the Capture Software bar code reader indicates how confident it was in correctly reading the bar code. If this confidence percentage (between 0 to 100%) falls below the specified confidence level, then a bar code value is not returned.

8. Change the quality level if desired.

   Settings range from **Worst (0)** to **Best (9)**.

   The highest quality bar codes are printed by a laser printer or pre-printed with an offset printer. Lower quality bar codes are printed with inkjet or dot-matrix technology. Depending on the quality of bar codes being scanned, set the Quality level accordingly. The higher the quality setting, the faster bar code read performance is.

9. Enable **Minimum partial read characters** when you want Capture Software to generate a bar code value, even if a bar code is incomplete.

   If enabled, enter the minimum number of characters that will be allowed for a partial read. This is useful for bar codes that are only used for document or batch separation where the absolute value is less critical.

   NOTES: For indexing purposes, it is recommended that you define field masks and minimum lengths in such a way that it is possible to detect partially read bar codes, thereby causing index field audit errors. Capture Software will not produce any bar code value if the bar code is incomplete and the Minimum partial read characters field is disabled.

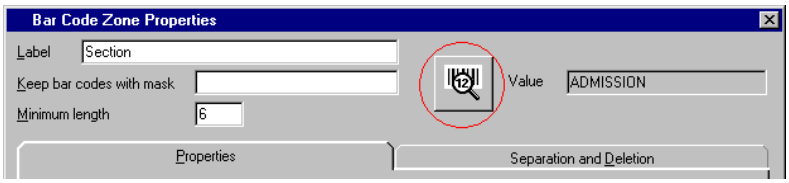
   Minimum Partial Read should not be used when **Verify Checksum** is enabled, as this may result in a bar code value being generated when checksum verification fails.

Testing bar codes

When a bar code zone is first drawn, Capture Software will attempt to read or test the bar code in the defined zone. If successful, the bar code value will be displayed in the **Value** box in the upper right of the Bar Code Zone Properties window. If unsuccessful, the **Value** box will be empty.

When editing a bar code zone, click the **Test** button to test the bar code. If successful, the bar code value will be displayed.

If unsuccessful, the message *The bar code could not be read* appears. Make any changes to the bar code properties, then click the **Test** button again to re-test the bar code.

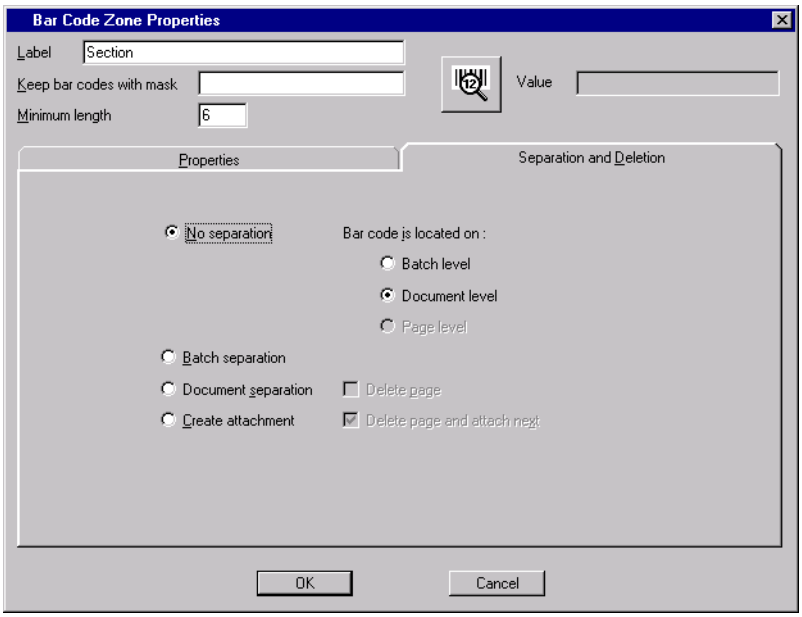


Using Separation and Deletion for bar code zones

When a bar code is detected, you can use the Separation and Deletion tab to enable the following options:

- Separate batches
- Separate documents
- Create attachments

Choose the Separation and Deletion tab to set any of these options.



- **No separation** — if you choose this option, you must indicate what level the bar code is located on. Bar codes can be found on one of the following levels:
  - **Batch level** — bar codes that are located on the Batch level or that separate batches are available for Batch and Document indexing.

    NOTE: Batch level bar codes are only read when they are present on a Batch Header page. A Batch Header page exists whenever batch separation is defined using patch codes or bar codes (at least one bar code zone in the application is configured for Batch separation). See the following section, “Separating batches.”
  - **Document level** — bar codes that are located on the Document level or that separate documents are available for Document indexing. They are not available for Batch indexing.
  - **Page level** — page level bar codes to be used for Page level indexing are not yet supported in Capture Software.

Separating batches

You can separate batches in the following ways:

- with a bar code
- with an OCR zone (see the section entitled “Setting OCR zone properties” later in this chapter)
- with a patch code (see the section entitled “Patch Setup dialog box” in Chapter 5 for more information)
- with a blank page (see the section entitled “Blank Page Setup dialog box” in Chapter 8 for more information)
- automatically after x documents
- by selecting **Batch>New** from the Capture Software menu bar

To separate a batch with a bar code:

1. Define the zone where you expect to find the bar code.
2. Check the **Batch separation** option.
3. Fill in the **Keep bar codes with mask** and /or **Minimum length** field in the Properties tab if you wish to restrict batch separation to a specific bar code value or mask.

IMPORTANT: Normally the page containing the bar code that separates the batch does not have any content. Therefore, the page containing the bar code which creates the new batch is always deleted. The next page scanned becomes the first page of the first document in the batch. Any bar codes on the Batch Header page can still be used in the batch or document index file.

When a batch is manually created (usually the first batch of the day), any batch level bar codes will not be read from the batch separator page if it is the first page scanned. This is because the batch was not automatically created from the batch separator page. As a result, you must do one of the following to batch index the first scan batch of the day successfully:

*Manually enter the batch index fields using the **Edit Batch Fields** option on the Index menu.*

Create a “dummy” first batch of the day and precede the batch with a “dummy” document. As a result, when the batch separator page is scanned, the batch will automatically be created and indexed.

Separating documents

You can separate documents using the following methods:

- with a bar code
- with an OCR indexing zone
- with a patch code (see the section entitled “Patch Setup dialog box” in Chapter 5 for more information)
- with a blank page (see the section entitled “Blank Page Setup dialog box” in Chapter 8 for more information)
- automatically after x pages
- by clicking on the **New Document** icon on the Button bar
- by pressing **Enter** during scanning
- by cutting off a part of a document using the **Saw** tool to create a new document

To separate documents with a bar code:

1. Define the zone where you expect to find the bar code.
2. Check the **Document separation** option.
3. Fill in the **Keep bar codes with mask** and/or **Minimum length** field in the Properties tab if you wish to restrict document separation to a specific bar code value or mask.
4. Check the **Delete page** option to delete the page containing the bar code that started the new document.

   This is important when inserts are used for the purpose of document separation and do not contain any significant information. The bar code, however, is still available for document level indexing.
5. Select **Rotate based on bar code** in the Properties tab if you want to rotate all the pages in the document in the same orientation as the orientation of the bar code on the Document Header.

NOTE: Rotating the document based on bar code does not work when the bar code separator page is deleted.

Example

Mask = “ER”9(8)”-“999 Minimum length = 14: Only bar code values with a length of 14 characters, starting with the string “ER” followed by eight numeric characters, a hyphen and three numeric characters will start a new document. For instance, the patient number bar code on the cover sheet of a folder starts a new document. The patient number can, in that case, also be used as a document index.

NOTE: If a bar code in the same zone creates a batch with a certain value and a document with another value, two zones must be drawn on top of each other.

Creating attachments

Creating attachments is useful in applications where typically every page is a document (e.g., transaction documents, such as; checks, airline tickets, invoices, etc.), but there is occasionally a page (such as a corresponding memo) that needs to be appended to a document.

You can automatically create attachments by using one of the following methods:

- with a bar code
- with an OCR indexing zone
- with a patch code (see the section entitled “Patch Setup dialog box” in Chapter 5 for more information)
- with a blank page (see the section entitled “Blank Page Setup dialog box” in Chapter 8 for more information)

You can append an attachment manually to a document by clicking the **Attach** button on the Button bar or by selecting **Attach** from the Document menu.

To create an attachment with a bar code:

1. Define the zone where you expect to find the bar code.
2. Check the **Create attachment** option.
3. Fill in the **Keep bar codes with mask** and/or **Minimum length** field in the Properties tab if you wish to restrict attachments to a specific bar code value or mask.
4. Check the **Delete page and attach next** option to delete the page (both front and rear) containing the bar code and to use the next page as the attachment.

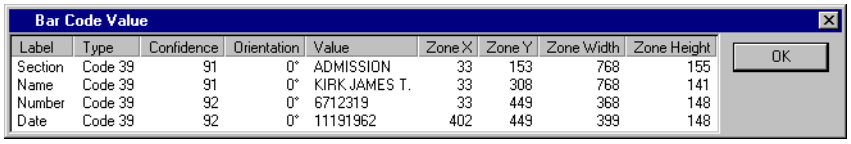
   This is useful when inserts are applied indicating whether the next page is an attachment. Any rotation will apply to the next page.
5. Select **Rotate based on bar code** in the Properties tab if you want to rotate the attachment (both front and rear) in the same orientation as the orientation of the bar code on the page.

*IMPORTANT: The **Create attachment** option is only valid for one attachment page. If multiple attachments are required, then an attachment bar code must be applied to each attachment.*

The bar code on the attachment page is not available for indexing.

Displaying bar code values

Bar code/OCR values can be displayed by selecting the **Test All Bar Code and OCR Zones** button or the **Test Selected Bar Code and OCR Zones** button on the Button bar. When you select this option, Capture Software attempts to read all bar code/OCR zones defined for a bar code/OCR value. If any bar codes/OCR text are found, the Bar Code Value window appears.



Label	Type	Confidence	Orientation	Value	Zone X	Zone Y	Zone Width	Zone Height
Section	Code 39	91	0°	ADMISSION	33	153	768	155
Name	Code 39	91	0°	KIRK JAMES T.	33	308	768	141
Number	Code 39	92	0°	6712319	33	449	368	148
Date	Code 39	92	0°	11191962	402	449	399	148

The Bar Code Value window shows the following information about each bar code:

- **Label** of the bar code zone.
- **Type** of bar code found in the zone.

  If the zone is an OCR zone, Type will be OCR.
- **Confidence** level (in a percentage) of the bar code value found.
- **Orientation** of the bar code (with 0 degrees representing a horizontal and right-side up bar code).
- **Value** of the bar code/OCR text.
- **X** and **Y** coordinates of the upper left corner of the bar code/OCR zone. The coordinates are in 1/100 of an inch and represent the distance of the zone from the upper left corner of the image.
- **Width** and **Height** of the bar code/OCR zone in units of 1/100 of an inch.

NOTE: If a bar code/OCR value cannot be found for a zone, the zone is still included in the value list with only the Label and zone coordinates displayed.

Tips for using bar codes

- Choose the page setup name that you will use for scanning before you define a bar code zone.
- Make sure that all glass surfaces within the scanner transport are clean. Dirty surfaces (the glass guides or glass over the camera area) will cause poor read rates.
- Perform an image calibration if the bar code read rates deteriorate.
- Use a higher resolution to obtain better read rates (300 dpi vs. 200 dpi).
- The positioning of the zone around the bar code can affect the confidence level of a bar code.

  Leave at least a ¼-inch of space around a bar code to guarantee that the full bar code will always fall within the zone. Move the zone around the bar code until the highest confidence rate is achieved.
- The minimum bar code height specification is 40 pixels (e.g., at 200 dpi, 40 pixels is 20/100 in.; at 300 dpi, 40 pixels is 13/100 in.). For bar codes that are smaller than 40 pixels in height, you must specify a **Bar code height** in the Bar Code Zone Properties window.
- Verify that the correct bar code type and bar code orientation is selected in the Bar Code Zone Properties window.
- If bar codes are on documents with color backgrounds, you may need to lower the Threshold value in Image Setup for improved read rates.
- Use bar codes that have a density of medium or lower, if possible. Bar codes of high density may require lowering the Threshold value in Image Setup to read the bar code.
- Lower the quality level as necessary to achieve better read rates on more difficult bar codes.
- Better read rates will be achieved from the rear bi-tonal scanner image versus the front binarized image when scanning in dual stream on a Color Scanner 3590C.
- When using **Anywhere** bar code zones, it is recommended to use a PC with a 2.0 GHz processor or higher. This will ensure Capture Software's ability to scan at scanner rated speeds when bar code reading is enabled in the application.

OCR Indexing

Drawing and selecting OCR zones

OCR zones are drawn in the Bar Code and OCR Setup window. Once you define an OCR zone, you can set up the OCR properties.

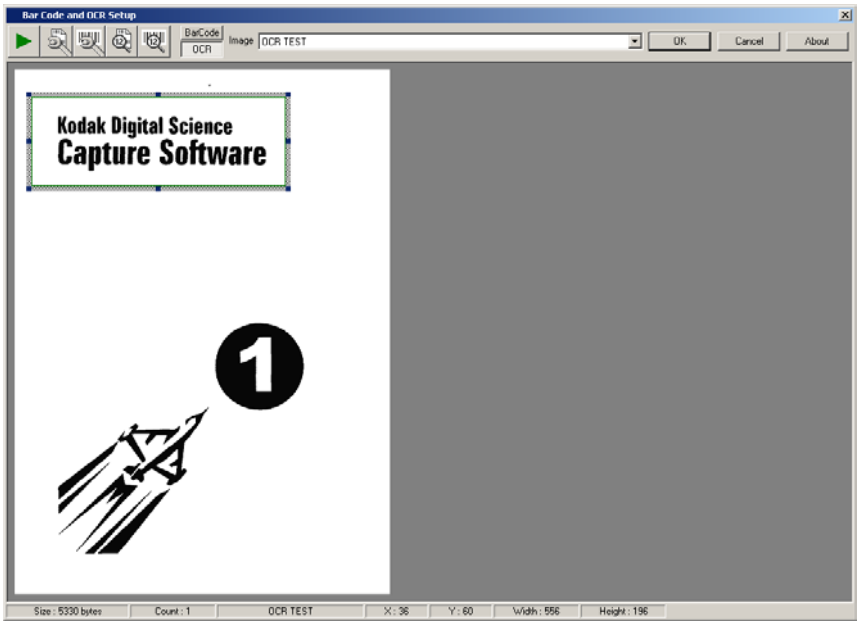
To draw an OCR zone:

1. Select the OCR button in the Bar Code and OCR Setup Tool bar.
2. Place the mouse cursor at the top left corner of the area of the displayed image where you want to define the OCR zone.

   For variable length and height OCR indexing, make sure that you draw the zone large enough to capture all indexing data. At the same time, be careful not to draw the zone too large so that stray data (e.g., lines on a form) can accidentally be captured.

NOTE: OCR zones are application-specific; not image-specific. Therefore, displaying a new image will continue to display the zones as defined.

3. Click the left mouse button and drag the cursor until a rectangle is drawn around the text area.

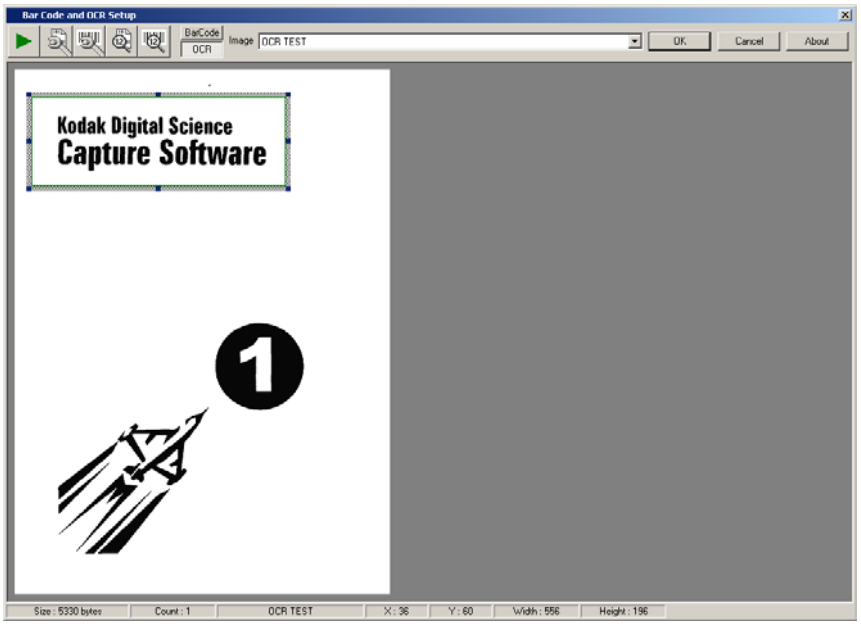


As the rectangle is drawn, the x and y coordinates and width and height are displayed (in 1/100 in.) in the status bar at the bottom of the screen.

You can delete or change the properties of an OCR zone.

To delete an OCR zone:

1. Select the OCR zone you want to delete by clicking the left mouse button on the zone you want to delete. The zone is highlighted.



2. Press the **Delete** key or choose **Cut** or **Delete Selected Bar Code Zone** from the Image context-sensitive menu. The zone is deleted.

To edit or change an OCR zone:

1. Select the OCR zone you want to edit.
2. Press the **Bar Code Zone and OCR Properties** button or choose **Bar Code Zone and OCR Properties** from the Image context-sensitive menu.

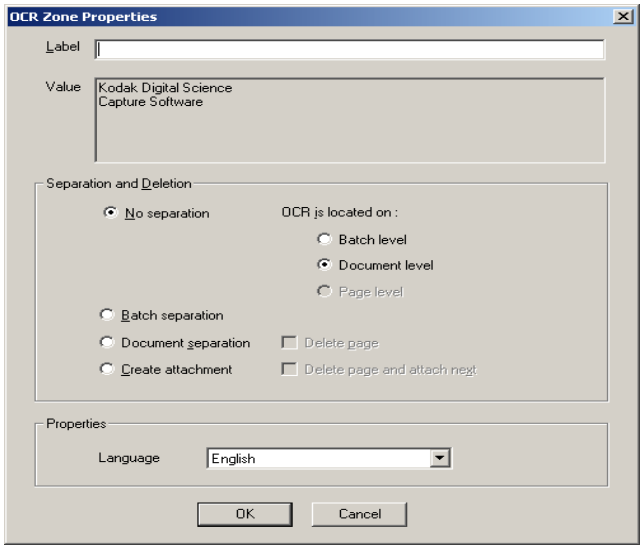
Bar Code and OCR Setup status bar for OCR zones

The Bar Code and OCR Setup status bar for OCR zones contains the following information:

- Size of currently displayed image
- Count of all zones (bar code and OCR) defined
- Label of currently selected OCR zone
- x and y starting position (in 1/100 in.) of currently selected OCR zone
- Width and height (in 1/00 in.) of currently selected OCR zone

Setting OCR zone properties

OCR zones provide Capture Software with information such as dimensions of the zone. After you draw an OCR zone, Capture Software attempts to read the information in the zone and automatically displays the OCR Zone Properties window with whatever text Capture Software could read in the zone.



When the OCR Zone Properties window is displayed, follow the procedures below to further define the zone properties:

1. Enter a name for the OCR zone in the **Label** field.

   This name identifies the text zone and appears in Index setup as OCR_[Label] in the list of default values. To assign an OCR value to an index field, refer to “Index setup tab — Default values” in Chapter 4.

IMPORTANT: The OCR label does not define or identify an Capture Software Index field. In Application Setup, all index fields must be defined in the Index tab. To use an OCR zone for an index field, you must assign the appropriate OCR_[Label] as a default value for the index field.

2. Specify an option in the **Separation and Deletion** group box.
3. Select a **Language** in the drop-down list. This will ensure that Capture Software properly OCRs special language-specific characters (e.g., Ç or ü).
4. Click **OK**.

Multi-line OCR

When the text in an OCR zone is on more than one line, Capture Software will insert the caret character (^) between each line of data. The result is a delimited string of OCR text that can be broken up into separate index fields. For example, in the screen example above, the generated OCR text string would be:

Kodak Digital Science^Capture Software

To index multi-line OCR text, refer to the section entitled, “Indexing multi-line OCR” in Chapter 4 of the User’s Guide.

NOTE: A gap between words on the same line that is greater than 5/16 of an inch will be interpreted by Capture Software as multi-line OCR data. For example, the following line of text:

Rochester NY

will result in a generated OCR text string of:

Rochester^NY

Using Separation and Deletion for OCR zones

When an OCR zone is detected, you can use the Separation and Deletion features to enable the following options:

- Separate batches
- Separate documents
- Create attachments

You can set the following Separation and Deletion options.

- **No separation** — if you this option, you must indicate what level the OCR zone is located on. OCR zones can be found on one of the following levels:
  - **Batch level** — OCR zones that are located on the Batch level or that separate batches are available for Batch and Document indexing.

    NOTE: Batch level OCR zones are only read when they are present on a Batch Header page. A Batch Header page exists whenever batch separation is defined using patch codes, bar codes, or OCR zones (at least one zone in the application is configured for Batch separation). See the following section, “Separating batches.”
  - **Document level** — OCR zones that are located on the Document level or that separate documents are available for Document indexing. They are not available for Batch indexing.
  - **Page level** — page level OCR zones to be used for Page level indexing are not yet supported in Capture Software.

Separating batches

To separate a batch with an OCR zone:

1. Define the OCR zone where you expect to find the OCR text.

   The area defined for OCR batch separation should be blank on all other pages in the batch.
2. Check the **Batch separation** option.

Separating documents

To separate documents with a OCR zone:

1. Define the OCR zone where you expect to find the OCR text.

   The area defined for OCR document separation should be blank on all other pages in the batch.
2. Check the **Document separation** option.
3. Check the **Delete page** option to delete the page containing the OCR zone that started the new document.

   This is important when inserts are used for the purpose of document separation and do not contain any significant information. The OCR zone, however, is still available for document level indexing.

   When the document separator page is deleted, Capture Software will also search the next page (the lead page of the document) for OCR zones defined at the document level. OCR data found in a zone on the lead page will be used for indexing in lieu of any data found in the same zone on the separator page.

Creating attachments

Creating attachments is useful in applications where typically every page is a document (e.g., transaction documents, such as; checks, airline tickets, invoices, etc.), but there is occasionally a page (such as a corresponding memo) that needs to be appended to a document.

You can append an attachment manually to a document by clicking the **Attach** button on the Button bar or by selecting **Attach** from the Document menu.

To create an attachment with an OCR zone:

1. Define the OCR zone where you expect to find the OCR text.

   The area defined for OCR attachment should be blank on all other pages in the batch.

2. Check the **Create attachment** option.

3. Check the **Delete page and attach next** option to delete the page (both front and rear) containing the OCR zone and to use the next page as the attachment.

   This is useful when inserts are applied indicating whether the next page is an attachment.

*IMPORTANT: The **Create attachment** option is only valid for one attachment page. If multiple attachments are required, then an attachment OCR zone must be applied to each attachment.*

The OCR zone on the attachment page is not available for indexing.

Tips for using OCR zones

OCR indexing uses local language lexicons and allows reading of alphanumeric text at high speed (1000 characters/second). It is zonal (similar to bar code reading) and is processed during scanning. The following text information can be recognized:

- ligatures (“joined” characters)
- broken characters
- degraded characters
- text from 200 to 600 dpi resolution
- text fonts from 8 to 72 points
- numbers from 0-9
- letters from A-Z and a-z
- symbols ! " $ % & ( ) * + , - . / :, ; < = > ? @ [\ ] { } £ ¥ § « »

For best results, follow these guidelines when using OCR:

- 300 dpi resolution
- 12-point sans serif font (or larger if using resolutions lower than 300 dpi)
- no skewed documents

The OCR indexing function:

- Supports the following languages:

Afrikaans	Dutch	French	Italian	Portuguese
Albanian	English (UK & US)	German	Luxembourgish	Spanish
Danish	Finnish	Icelandic	Norwegian	Swedish

- Does not recognize MICR fonts like E13B or CMC7

Disclaimers

- OCR technology by I.R.I.S. ©2002-2005, All rights reserved
- Bar code technology by I.R.I.S. ©2002-2005, All rights reserved

The following OCR and bar code-related disclaimer conditions apply to *Kodak* Capture Software.

- Although the product uses state-of-the-art OCR and bar code technology, accurate recognition under all conditions cannot be guaranteed. All software and documentation are delivered as such without any express or implied warranty of OCR and bar code recognition accuracy.

  Kodak and its suppliers shall not be liable for any direct or indirect misuses and or damages subsequent to illegal use or infringement caused by the user in modifying, copying, reproducing, or translating any part of information retrieved with OCR and bar code recognition technologies in *Kodak* Capture Software.

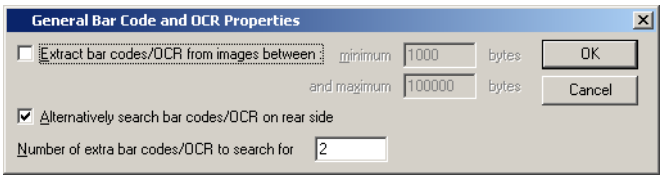
General Bar Code and OCR Properties

The General Bar Code and OCR Properties dialog box provides application-level bar code properties that apply to all bar code and OCR zones defined for the application.

To set General bar code or OCR properties:

1. From the Bar Code and OCR Setup window, choose the **General Bar Code and OCR Properties** button from the tool bar.

   The General Bar Code and OCR Properties dialog box appears.



2. Enter values in the **Extract bar codes/OCR from images between** minimum and maximum fields.

   The values entered in these fields limit the images from which bar codes or OCR text will be read to only those whose size falls in between these values. This is useful when using bar code header sheets for document separation and indexing that are significantly smaller than the rest of the pages of the document. This option can increase the performance of scanning into the bar code/OCR application. When this option is enabled, the minimum default value is 1000 bytes and the maximum default value is 100,000 bytes.

3. Enable **Alternatively search bar codes/OCR on rear side** if you want to search for the bar code/OCR text on the rear side of the document.

   Enabling this option increases document/batch separation and indexing accuracy when pages are accidentally reversed before scanning.

4. Specify a number in the **Number of extra bar codes/OCR to search for** field if you want Capture Software to search the image for the specified number of extra bar codes.

   By default, Capture Software searches for bar codes equal to the number of bar code zones defined. Use the **Number of extra bar codes/OCR to search for** field when documents contain extraneous bar codes (that will not be used for indexing) in addition to the expected bar codes. It is primarily useful when the expected bar codes are defined to be **Anywhere** on an image with a **Keep bar codes with mask** value. The default is two extra bar codes.

   NOTE: This option does not apply to OCR indexing.

5. Click **OK** to set the general bar code or OCR properties you entered.

7 Bar Codes, Patch Codes, and OCR Indexing with Color Scanners

NOTE: For i50, i60 and i80 Scanners, bar code and patch code reading and OCR indexing are **not supported** when color or grayscale scanning.

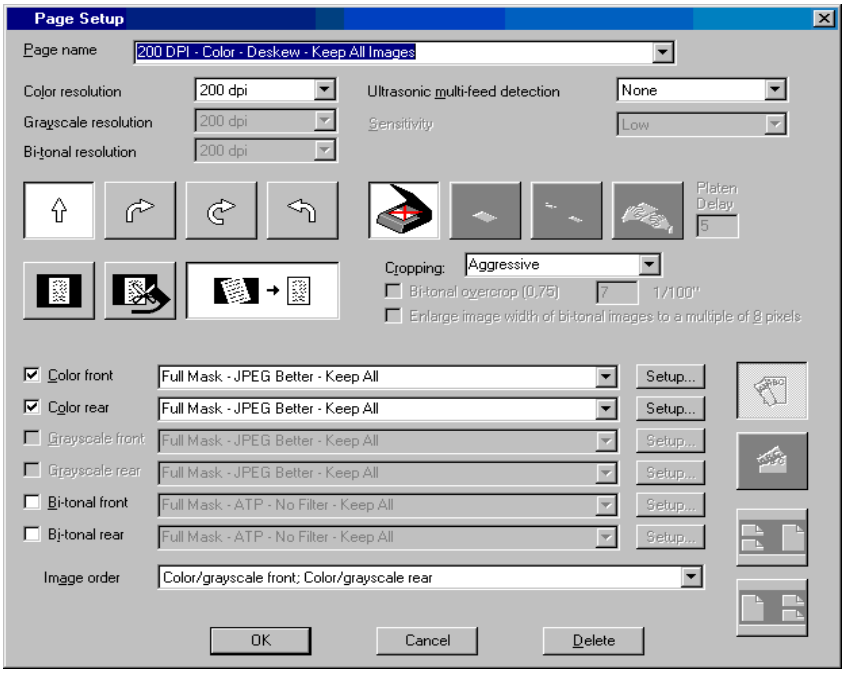
Bar code and patch code reading and OCR indexing when color scanning

Bar code reading, patch code reading and OCR indexing is done using the bi-tonal front or rear images.

When dual stream scanning (e.g., scanning color and bi-tonal simultaneously) the bi-tonal images are used for bar code and patch code reading and OCR indexing. When a bar code/patch code/OCR text is detected, all four images (color front; color rear; bi-tonal front; bi-tonal rear) of the page are either deleted or attached to the new/current document or batch according to your Bar Code/Patch Code/OCR Setup.

When color or grayscale scanning, Capture Software will still scan the bi-tonal images “behind the scenes” using the grayed-out bi-tonal Page and Image setup settings (e.g., Bi-tonal resolution, Contrast, Threshold).

While the “behind the scenes” bi-tonal images are never displayed or stored to disk, they are used for bar code and patch code reading and OCR indexing.



Perform the following steps when setting up your color-only or grayscale-only scanning application:

1. Enable the bi-tonal cameras in Page Setup and adjust the Page and Image bi-tonal settings as necessary to achieve the best bar code/patch code read rate or OCR results.
2. Scan some sample pages in dual stream (e.g., color and bi-tonal simultaneously) to make sure that bar code/patch code/OCR reading works correctly.

3. Go back into Page Setup.
4. Disable the bi-tonal cameras for production color-only scanning.

NOTES:

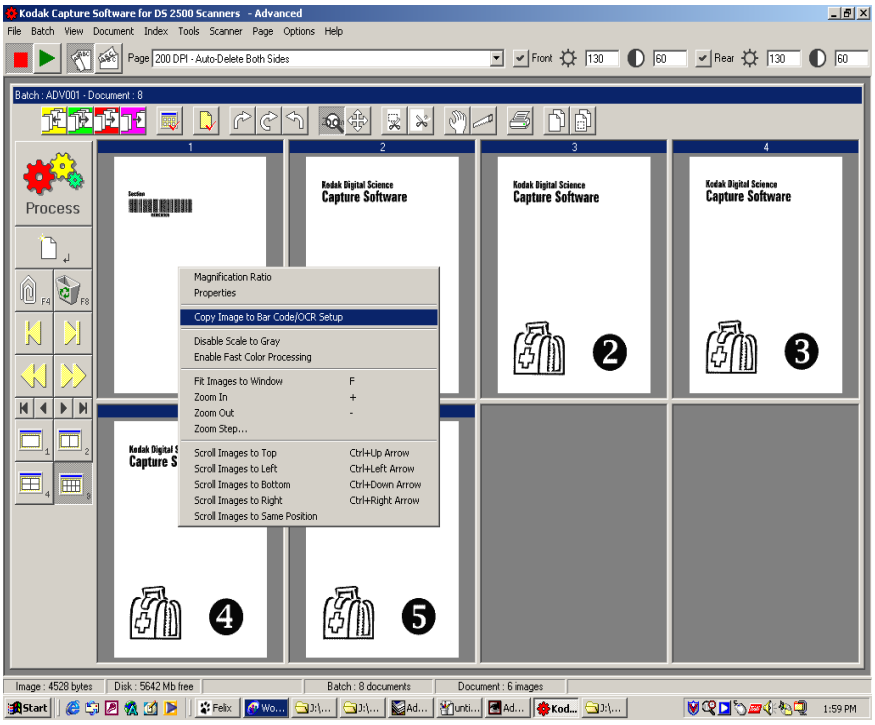
- When scanning a sample image in Bar Code/OCR Setup for the purposes of defining bar code/OCR zones, Capture Software will always scan and display the front bi-tonal image.
- When setting the bi-tonal resolution to a higher value (e.g., 300 dpi) for the purpose of obtaining better read rates on difficult-to-read bar codes or for OCR indexing, overall scanner throughput may be affected. For example, if you scan using a color resolution of 100 dpi and the Bi-tonal resolution is set to 300 dpi, the *Kodak* Scanner will scan at its rated speed for 300 dpi. This is because “behind the scenes,” the scanner is still scanning at 300 dpi bi-tonal.

Setting up bar code/OCR zones for color scanning

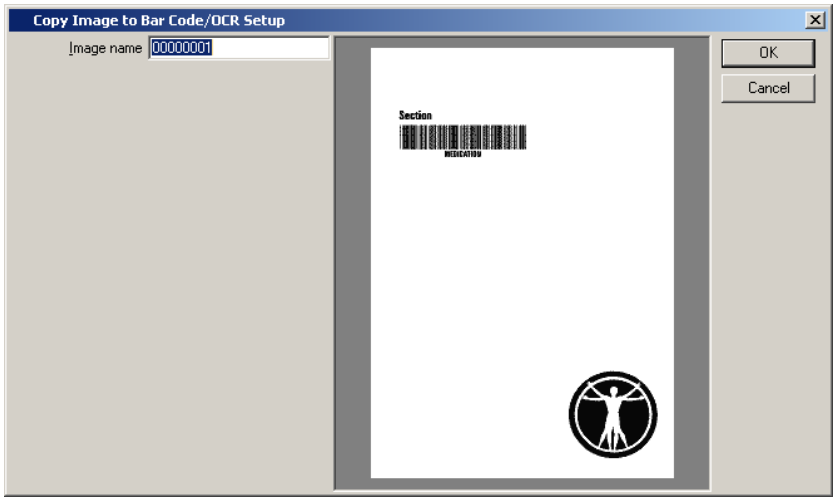
When color scanning, bar code zone setup, as described in Chapter 6, *Bar Code/OCR Setup*, may only be done using bi-tonal or binarized images.

Follow the steps below to capture a bi-tonal image for the purposes of bar code/OCR setup.

1. Scan the same bar code/OCR page using a *Dual Stream* page setup (as provided by Capture Software).
2. Select the bi-tonal image containing bar codes/OCR zones and click the right mouse button. The Image context-sensitive menu appears.


Kodak Capture Software for DS 2500 Scanners - Advanced
File Batch View Document Index Tools Scanner Page Options Help
Batch : ADV001 - Document : 8
Process
Magnification Ratio
Properties
Copy Image to Bar Code/OCR Setup
Disable Scale to Gray
Enable Fast Color Processing
Fit Images to Window F
Zoom In +
Zoom Out -
Zoom Step...
Scroll Images to Top Ctrl+Up Arrow
Scroll Images to Left Ctrl+Left Arrow
Scroll Images to Bottom Ctrl+Down Arrow
Scroll Images to Right Ctrl+Right Arrow
Scroll Images to Same Position
Kodak Digital Science
Capture Software

3. Select the **Copy Image to Bar Code/OCR setup** option. The Copy Image to Bar Code/OCR Setup window appears.



4. Enter the new image name.
5. Click **OK**.

   Once the bi-tonal image has been copied to Bar Code/OCR Setup, follow the procedures described in Chapter 6, *Bar Code/OCR Setup*, to set up the bar code/OCR zone properties.

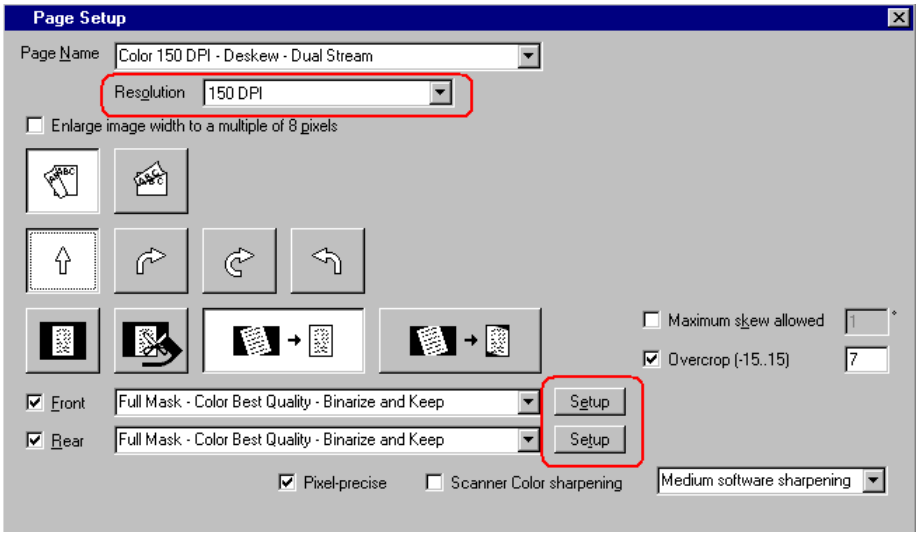
Bar code and patch code reading and OCR indexing with Color Scanners 3590C and 4500

When color scanning with Color Scanners 3590C or 4500, bar code and patch code reading and OCR indexing are actually done on the binarized color images. Therefore, binarization must be enabled while scanning in order to perform indexing and document/batch separation from bar codes, patch codes, and OCR zones on color images. Because binarization may only be done on 150 dpi color images, bar code and patch code reading and OCR indexing are only supported for color scanning at 150 dpi.

All of the bar code, patch code and OCR indexing features described in Chapter 5, *Patch Code Setup* and Chapter 6, *Bar Code/OCR Setup*, are supported exactly the same for binarized color images as they are for bi-tonal images when scanning with a black-and-white scanner.

Enabling binarization for bar code and patch code reading and OCR indexing

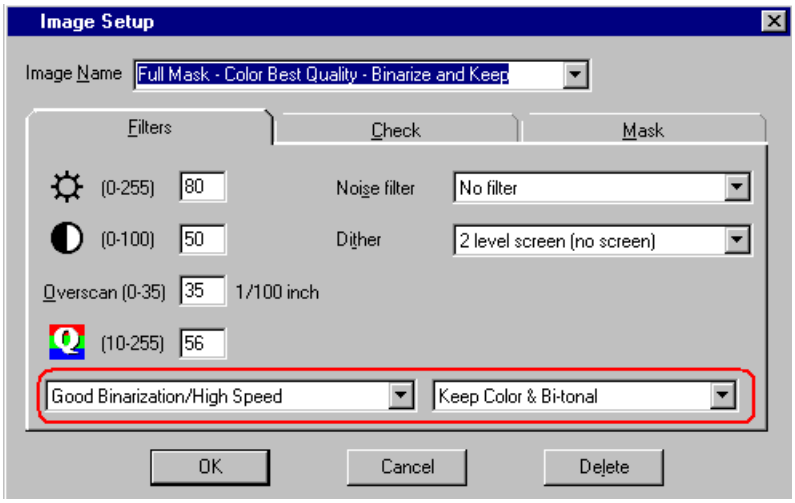
To enable binarization for bar code or patch code reading and OCR indexing, you must configure a Page Setup and an Image Setup in the following manner. (For information about Page Setup and Image Setup, refer to Chapter 9, *Setting up Page Properties*.)



1. Select **150 DPI** on the Resolution drop-down list in the Page Setup dialog box.
2. Click on the **Setup** button for the Front and/or Rear image.

   Binarization of color images may be enabled separately for the front and rear images.

   If bar code and patch code reading and OCR indexing will be configured to **Alternatively search bar codes on rear side**, then binarization should be enabled for both the Front and Rear image setups. However, if for performance reasons you choose to disable searching on the rear, then you need to enable only the Front image setup.



3. Enable one of the Binarization options on the bottom left drop-down list in the Filters tab on the Image Setup dialog box.

   For the best bar code and patch code read rate results, the **Good Binarization/High Speed** setting is recommended.

For the best OCR results, the **Best Binarization/Low Speed** setting is recommended.

If binarization is being performed only for bar code/OCR indexing or document/batch separation using patch codes or bar codes, the binarized images may be discarded (and therefore will not be displayed during scanning) after bar code/patch code/OCR reading.

To discard binarized images, select **Keep Color Only** in the bottom right drop-down list in the Filters tab in the Image Setup dialog box.

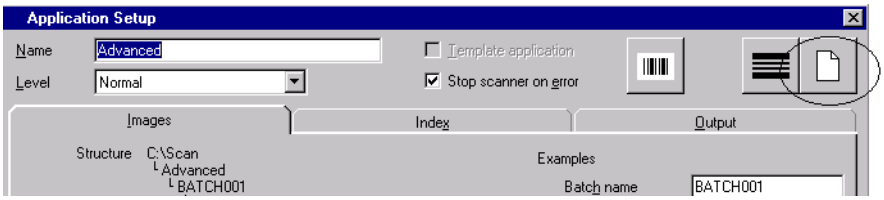
8 Blank Page Setup

Use Blank Page Setup when you want to use blank pages as batch or document separator pages, much in the same way that patch code pages are used. You can also define a blank page to create an attachment.

Using the Blank Page Setup dialog box

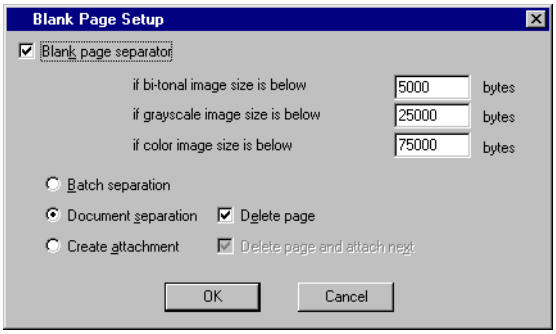
To access the Blank Page Setup dialog box, follow the steps below.

1. From the Capture Software main window, select the application for which you want to set up blank page information. Access the Application Setup dialog box.
2. Select the Setup Blank Page icon located in the upper right-hand corner of the window.



The Blank Page Setup dialog box appears.

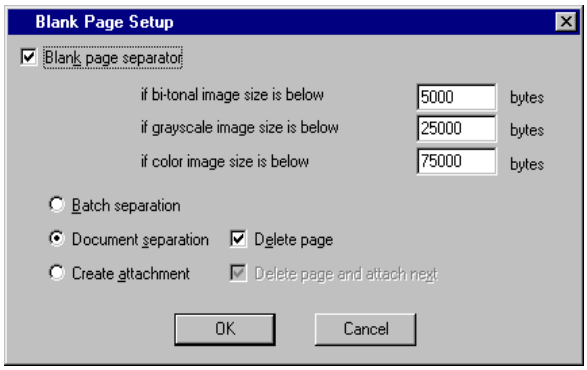
NOTE: Depending on your scanner, the Blank Page Setup dialog box may not have all of the options shown here. See “Blank page setup options” for a description of each option.



3. Enable all desired options.
4. Click **OK**.

Blank page setup options

Following is an explanation of the options on the Blank Page Setup dialog box.



Blank page separator — enable or disable this option for blank page separation. If enabled, you must specify the image size in bytes, below which an image is determined to be a blank page. Specify a blank image size for each image type (bi-tonal, color, and grayscale) that you will be scanning. 3000 bytes is suggested by default for bi-tonal images. The maximum image size that can be specified is 1,000,000 bytes (i.e., 1 MB) to allow for blank page separation when color scanning.

IMPORTANT: The size of both the front and rear image of a page must fall below the byte threshold in order for the page to be determined as blank. The image size is checked against the raw or pure image coming from the scanner before any auto-rotation, auto-crop, and automatic deskew operations are performed.

When dual stream scanning (e.g., scanning color and bi-tonal simultaneously) both the bi-tonal and color image sizes are used to determine a blank page. When a blank page is detected, all four images (Color front; Color rear; Bitonal front; Bitonal rear) of the page are either deleted or attached to the new/current document according to the Blank Page Setup.

A blank page can be defined to start a new batch, start a new document (default), or create an attachment.

Batch separation — creates a new batch with a blank page. The blank page will automatically be deleted and the next page scanned becomes the first page of the first document of the batch.

Document separation — creates a new document with a blank page. This is the default selection when blank page separation is **enabled.**

- **Delete page** — deletes the blank page. The next page scanned becomes the first page of the document.

Create attachment — creates an attachment with a blank page. The page (both front and rear) immediately following the blank page is the attachment. This option is only valid for one page. Therefore, you must insert a blank page before every attachment.

NOTE: Use this option, in conjunction with the option **Create a document every X pages** (Application Setup>Images-Document tab), whenever there is an occasional attachment to documents of a fixed amount of pages.

- **Delete page and attach next** — deletes the blank page and attaches the next page to the document.

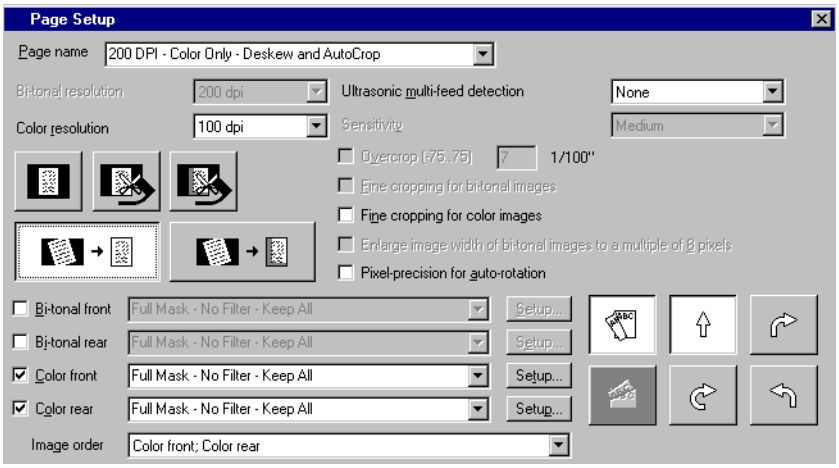
NOTE: When this option is disabled, both the blank page and next page are attached to the document.

Blank page separation with i800 Series Scanners

For i800 Series Scanners, blank page separation is based on the image size of the bi-tonal front and rear images.

When dual stream scanning (i.e., scanning color/grayscale and bitonal simultaneously) with an i820 Scanner or i840 Scanner, the bi-tonal image size is used to determine a blank page. When a blank page is detected, all four images (color front; color rear; bi-tonal front; bi-tonal rear) of the page are either deleted or attached to the new/current document according to the Blank Page Setup.

When color-only scanning with an i820 Scanner or i840 Scanner, Capture Software will still scan the bi-tonal images “behind the scenes” using the grayed-out bi-tonal Page and Image Setup settings (e.g., bi-tonal resolution, Contrast, Threshold).



While the “behind the scenes” bi-tonal images are never displayed or stored to disk, they are used for blank page separation. When setting up your color-only scanning application, you should first scan a sample blank page in dual stream, note the bi-tonal image size, then set the blank page byte threshold accordingly.

9 Setting Up Page Properties

About Page Setup

Page Setup allows you to communicate information such as resolution, threshold, contrast, and image filters to the scanner. It also activates Capture Software functions such as auto-rotate and enables the merge and split options. A **brief** summary of the options on the Page Setup dialog box is provided in this chapter.

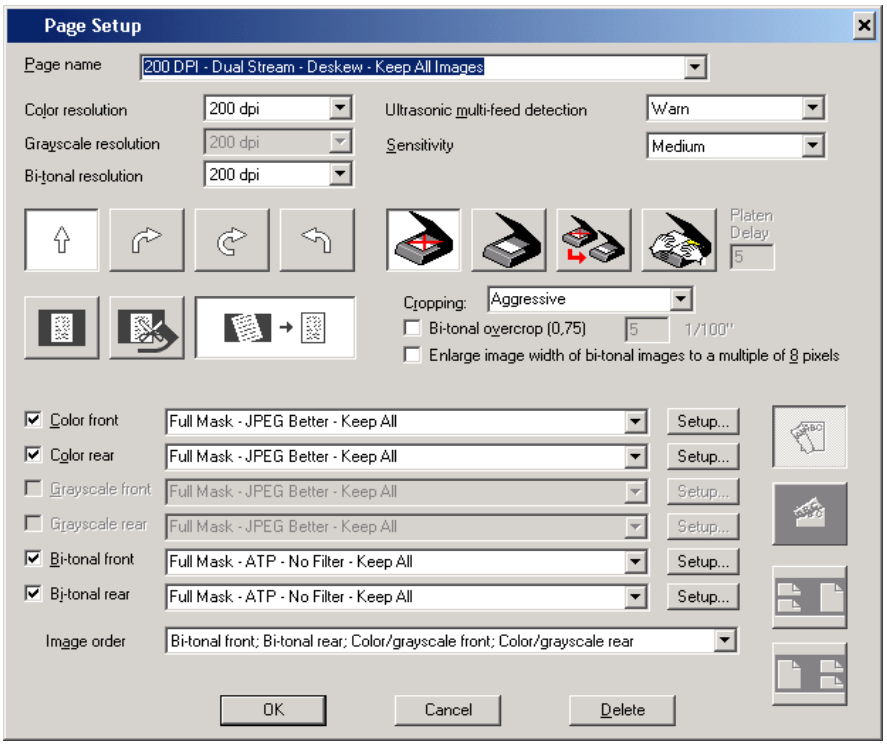
IMPORTANT: The options on the Page Setup dialog box illustrated in this chapter apply to most Kodak scanners. The Page Setup dialog box for your scanner may be different. Additional options, valid values, defaults and limitations regarding Page Setup can be found in the scanner-specific Appendix for your scanner.

Page Setup dialog box

To access the Page Setup dialog box:

- Select **Page>Setup**.

The Page Setup dialog box appears with the page properties of the page setup name selected from the main Capture Software window.



Page name — select an existing page name from the drop-down box, or enter a new page name.

Color, Grayscale, Bi-tonal-resolution — select the desired resolution from the drop-down list(s) for the page setup. Available resolutions are:

- **i50, i60, i80 Scanners:**
  50, 72, 100, 144, 150, 200, 240, 300, 400, 600 or Custom dpi

  NOTE: If you select **Custom** for an i50 Scanner, you can enter a value from 50 to 600 dpi. If you select **Custom** for an i80 Scanner, you can enter a value from 50 to 1200 dpi.

- **i30, i40 Scanners, i55, i65 Scanners, i100 and i200 Series Scanners:**
  75, 100, 150, 200, 240, 300, 400 and 600 dpi
- **i600 Series Scanners:**
  Bi-tonal: 200, 240, 300, and 400 dpi
  Color/Grayscale: 100, 150, 200, 240 and 300 dpi
- **i800 Series Scanners**:
  Bi-tonal: 200, 240, 300 and 400 dpi
  Color: 100, 150, 200, and 300 dpi
- **3520 Scanner:**
  Bi-tonal: 200 or 300 dpi
- **3590C and 4500 Color Scanners:**
  Bi-tonal: 200 or 300 dpi
  Color: 100 and 150 dpi

NOTES:

- When scanning in color with a Scanner 3590C, a setting of 100 dpi results in front color images of 100 dpi and rear bi-tonal images of 200 dpi. Likewise a setting of 150 dpi results in front color images of 150 dpi and rear bi-tonal images of 300 dpi.
- When bi-tonal scanning, the color and grayscale image resolution settings are not available.
- When color-only or grayscale-only scanning, the bi-tonal image resolution setting is not available.
- When color scanning, the grayscale resolution setting is not available. Similarly, when grayscale scanning, the color resolution setting is not available.
- When dual-stream scanning (e.g., color and bi-tonal at the same time), the scanner transport will run at a speed that is based on the highest resolution setting. The higher the resolution setting, the slower the transport speed.

IMPORTANT: When color-only or grayscale-only scanning, Capture Software "behind the scenes" will still scan in dual-stream using the grayed-out bi-tonal Page and Image settings. The bi-tonal images will never be displayed or stored to disk, but they will be used as necessary for patch code reading, bar code reading, etc. As a result, the grayed-out bi-tonal resolution may dictate the speed at which the scanner runs. For instance, if the color resolution is set to 100 dpi, but the grayed-out bi-tonal resolution is set to 300 dpi, the scanner will run at a slower transport speed due to the 300 dpi bi-tonal setting.

Ultrasonic multifeed detection — multi-feed detection aids in document processing by detecting documents that go through the feeder overlapped. Select how you want to be notified if a multifeed occurs. The selections vary based upon your scanner.

When a **Warn** option is selected, the scanner warns you with an audible alarm whenever a multi-feed is detected. The scanner will either remain enabled (and continue scanning) or will be disabled (and scanning will stop) depending on your selection.

NOTE: Ultrasonic multi-feed detection is available for i100, i200, i600 and i800 Series Scanners.

Sensitivity — if Ultrasonic multifeed detection is enabled, make a selection from the Sensitivity drop-down list. Choose from either **Low**, **Medium** or **High**. Select **High** when scanning thinner documents for more frequent occurrences of multi-feeds. Select **Low** when scanning thicker documents for less frequent occurrences of multi-feeds.

Rotation options — selecting one of these options allows you to rotate images before storing them**.** If bar codes or patch codes are defined, the rotation of the page template is first applied, then the bar code/patch code is located, then the rotation according to the bar code/patch code is applied. The bar code/patch code determines the final rotation**.**

No rotation

Rotates 90°

Rotates 180°

Rotates 270°

Flatbed options — these options are only available if you have a flatbed with your scanner.

Use feeder: disables flatbed scanning and enables the automatic feeder.

Use platen: enables flatbed scanning one page at a time. The scanner stops after the page is scanned. You must start the scanner in Capture Software for each page scanned with the flatbed.

Use feeder or platen: enables ADF/platen mode. When documents are in the automatic document feeder, the scanner will scan using the feeder. When the feeder is empty, the scanner scans from the platen (flatbed). ADF/platen mode is available for the *Kodak* i55 and i65 Scanners and the *Kodak* i200 Flatbed Accessory.

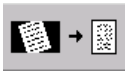
Use platen repeatedly: enables flatbed scanning for continuous scanning. This option, useful for scanning books, scans repeatedly at regular intervals until you stop the scanner in Capture Software.

Platen Delay — when **Use platen repeatedly** is selected, the amount of time between flatbed scans is based upon the number of seconds specified in the Platen Delay setting.

Auto-crop and deskew — select one of the following options.

Disable black border removal and deskew: no auto-crop or deskew will take place. Also referred to as *Fixed cropping*. The settings on the Mask tab of each Image Setup (see the section entitled, “Using Image Setup” later in this chapter), determines the image produced by the scanner.

Remove black borders: the image is auto-cropped. No deskew takes place.



Remove black borders and deskew: the image is auto-cropped and deskewed.

Cropping — when **Auto-Crop** and **Deskew** are enabled, the following cropping choices are available:

- **Automatic**: the image is auto-cropped by the scanner. A slight amount of black border may still exist on the edges of the images.
- **Aggressive**: the image is auto-cropped by the scanner with the goal of completely removing any remaining black borders that may be left over after regular auto-crop and deskew processing.

  NOTE: Image content at the image edges may be affected. If you are scanning documents that have content at the edge of the paper, select **Automatic** cropping.

- **Relative to document** (*also known as zone processing)* — the image is auto-cropped and deskewed by the scanner. The settings on the Mask tab of each Image Setup (see the section entitled, “Using Image Setup” later in this chapter) to determine the portion of the auto-cropped and deskewed image produced by the scanner. For more information about *zone processing* see the section entitled “Zone processing” later in this chapter.

Bitonal overcrop — removes pixels from all sides of an auto-cropped image Overcrop only works on bi-tonal images, and is only available when **Remove black borders** (with or without Deskew) is enabled. Enter an overcrop value in 1/100 of an inch (0 to 75).

Enlarge image width of bi-tonal images to a multiple of 8 pixels — enable this option to add pixels to the right or bottom edge of the image to make it MOD 8 compliant. This option only works with bi-tonal images.

Mod 8 compliant means that the number of horizontal pixels of an image is a multiple of eight; some applications require Mod 8 images.

Front and rear image setup options

Capture Software allows different image setups for *front* and *rear* sides of a page for color, grayscale, and bi-tonal (black and white) scanning.

To set the front or rear options:

Check the **Color front**, **Color rear**, **Grayscale front**, **Grayscale rear**, **Bi-tonal front**, or **Bi-tonal rear** check box.

- Select the desired image setup for the selected front and rear sides from the drop-down list box.
- If you want to create a new image setup or modify the one selected, click **Setup**. The Image Setup dialog box appears.
- Select the desired options on the **Filters**, **Check**, **Mask**, and **Color Dropout** tabs.
- Click **OK** on each tab when you are finished setting options.

For complete details on image setup, see the section entitled “Using Image Setup.”

NOTES:

- *For scanners with flatbed functionality*. When flatbed scanning is enabled, only the front image setup options are available.
- For dual-stream scanning, enable at least one bi-tonal image and one color or grayscale image.
- For the i610 Scanner, color scanning is not available.
- For i800 Scanners, grayscale scanning is not available.
- Color and grayscale scanning are mutually exclusive. When color front or color rear is selected, the grayscale image setup options are not available. Similarly, when grayscale front or grayscale rear is selected, the color image setup options are not available.
- When color or grayscale scanning, bi-tonal scanning is still performed “behind the scenes” using the grayed-out bi-tonal page and image settings. Bi-tonal images will never be displayed or stored to disk, but will be used, as necessary, to perform functions such as patch code reading, bar code reading, etc.
- If a disabled or grayed-out image type in Page Setup is enabled via the Scanner Bar buttons in the Capture Software main window, the grayed-out page and image setup settings are used for scanning.
- *For scanners with Color Toggle Patch functionality*. When **Color Toggle Patch** is enabled, the page setup must be configured for bi-tonal-only or color-only scanning in order for Color Toggle Patch to take effect. For more information, refer to the section entitled, “Color-on-the-fly using toggle patch” in Chapter 4.

Image order — specifies how images are displayed “on the fly” during scanning and stored to disk. The default for dual-stream scanning is Color/Grayscale Front, Bi-tonal Front, Color/Grayscale Rear, Bi-tonal Rear.

Classic or Calendar duplex mode

Classic duplex mode: duplex scanning format typically associated with multi-page reports.

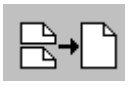
Calendar: duplex scanning format typically used for presentation handouts, financial reports, etc.

See the section entitled, “About Duplex modes” in Chapter 3, *Working in Capture Software* for more information.

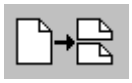
NOTES:

- Calendar duplex mode is not available for color or grayscale scanning.
- Calendar duplex mode is not available with *Kodak* Capture Software Lite.

Merge and split



Merge: combines the front and rear image into one image (for instance front and rear of a check becomes one image).



Split: allows you to split a scanned page into two or three images per side.

See the section entitled, “Using Merge and Split options” in Chapter 3, *Working in Capture Software* for more information.

NOTES:

- Merge and Split options are not available for color or grayscale scanning.
- Merge and Split options are not available with *Kodak* Capture Software Lite.

Zone processing

Zone processing allows you to define different zones for bi-tonal and color images when dual-stream scanning. It is particularly useful, for example, in insurance applications where a claim form may contain a photograph of a damaged vehicle. With Zone processing, you can produce a bi-tonal image of the entire claim form while at the same time producing a color image that contains only the photograph

When **Relative to Document** is selected, scanned pages will always be auto-cropped and deskewed in the scanner. Zone definitions for each image (as defined in the Mask tab of Image Setup in Capture Software) are based on the upper left corner of the auto-cropped page.

In Capture Software, when Zone processing is enabled, all the images selected must have a zone definition in the Mask tab. As a result, Capture Software assumes that Zone processing will only be done when scanning same size documents.

In order to set up Zone processing properly, it is important that each zone definition (as defined in the Mask tab) **must not be larger or fall outside of the dimensions of the physical pages being scanned.** If all zone definitions do not follow this general rule, then the scanner will stop immediately with an error condition and the scanner will be disabled. The scanner transport must be cleared and the scanner restarted from Capture Software to resume scanning.

NOTE: When color-only scanning with Zone processing is enabled, even the grayed-out bi-tonal zone definitions must follow this rule. This is because Capture Software actually scans in dual stream “behind-the-scenes” when color-only scanning.

For example, let’s assume that an automobile accident claim form is to be zone processed. The desired output is a full image of the Front Bi-tonal, Rear Bi-tonal, and Rear Color. However, for the Front Color, only the picture of the damaged vehicle is required. The claim form is a letter-size document (8.5 by 11 in.) scanned in portrait mode. The 2 x 2 in. photograph is located 5 inches in from the left side and four inches down from the top of the page. The following zone definitions will achieve the desired result (where the dimensions of the zone definitions are in 1/100 in.).

	Left	Top	Width	Height
Bi-tonal front	0	0	850	1100
Color front	500	400	200	200
Bi-tonal rear	0	0	850	1100
Color rear	0	0	850	1100

Using Image Setup

The options on the Image Setup dialog box described in this section apply to most Kodak scanners. The Image Setup dialog box that is displayed in this chapter may be different depending upon the model of your scanner. See your appropriate scanner Appendix for scanner-specific differences.

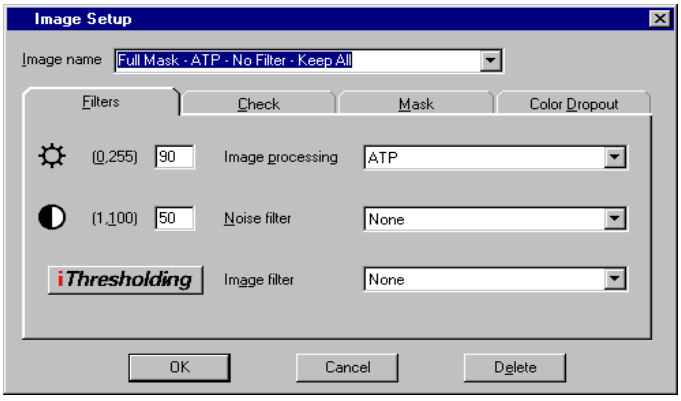
Following are descriptions of the tabs on the Image Setup dialog box.

NOTE: The **Delete** button on the Image Setup dialog box allows you to delete an image setup and remove it from the list of available image setups.

Filters tab

The Filters tab is different for bi-tonal and color/grayscale image setup.

Filters tab for bi-tonal image setup



Threshold — threshold controls the lightness and darkness of the background in an image. As the threshold value increases, more of the darker grays in the image turn black. As the threshold value decreases, fewer darker grays turn black. Enter a value between 0 and 100.

Contrast — contrast enhances the edges contained in a document. Increasing the contrast level sharpens the image edges. Decreasing the contrast level softens the image. Enter a value between 0 and 100.

iThresholding — when iThresholding is enabled, the scanner automatically determines the optimal Threshold setting for each scanned page, thereby improving overall scanning productivity and image quality. With the iThresholding feature, the need to make adjustments to the Threshold setting when scanning mixed documents of different colored or shaded backgrounds is greatly reduced.

When iThresholding is enabled, the Threshold and Image processing settings are grayed out. The scanner will automatically perform Adaptive thresholding processing and will determine the optimal Threshold setting.

Image Processing — select from the following options:

- **Adaptive thresholding** (**ATP**) — the Adaptive Threshold Processor separates the foreground information in an image (i.e., text, graphics, lines, etc.) from the background information (i.e., white or non-white paper background).

  Adaptive Thresholding works on grayscale scanned images and outputs a bi-tonal electronic image. Its strength lies in its ability to separate the foreground information from the background information even when the background color or shading varies and the foreground information varies in color quality and darkness. Different types of documents may be scanned using the same image processing parameters and results in excellent scanned images. If mixing documents of different colors, paper qualities and textures, and print quality, the Adaptive Thresholding features optimize each image automatically.

  When Adaptive Thresholding is selected, all of the other settings in the Filters tab are available for selection. A Contrast value of 100 is considered fully adaptive thresholding.

- **Fixed Processing** — used for black-and-white and other high-contrast documents. A single level is set to determine the black-and-white transition. The threshold is programmable over the entire density range. Fixed thresholding sets contrast to 0 when scanning is initiated. If Fixed Processing is selected, Contrast is not available.

- **Dithering** — simulates gray shades and should be used for scanning photos. It is not recommended for text-only images.

  Three options are available:

  - 64-Level Bayer Dither
  - 64-Level 45 Degree Clustered Dot Screen
  - 64-Level Dispersed Dot Screen

NOTES:

- When **Dithering** is selected, all of the other settings on the Filters tab are not available.
- In Capture Software, because bi-tonal images are always scanned with Group 4 compression, Dithering may cause negative image compression (less than one-to-one) which results in very large image sizes for bi-tonal images.

Noise filter — increases the compression ratio and improves the appearance of document images.

- **Majority Rule**: determines central pixel data according to the number of white and black pixels.
- **None**: no enhancement is done to the images.
- **Lone Pixel:** reduces random noise on bi-tonal images by converting a black pixel surrounded by white pixels to white and by converting a white pixel surrounded by black pixels to black.

NOTES: Using the noise filter on documents containing very fine detail (e.g., the dot on an “i” in 4-point type) may cause information to be lost. It is recommended that the noise filter not be used when scanning documents with text smaller than 7-point type.

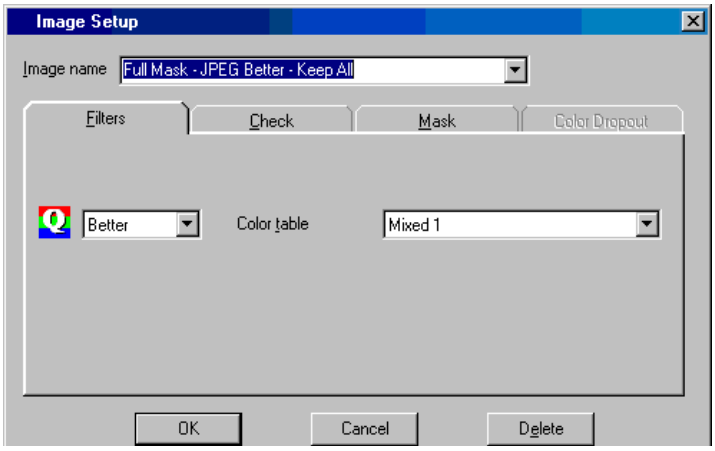
Using the noise filter in conjunction with thresholding will optimize the appearance of document images.

Do not use the noise filter with screening (dithering).

Image filter — select **None** or **Halftone removal.** Halftone removal is used to enhance images. containing dot matrix text and/or images with shaded or color backgrounds using halftone screens. This filter effectively eliminates noise caused by the halftone screens.

NOTE: For the i600 Series Scanners, do not enable Halftone Removal when the Page Setup is configured to do Rotation or when the Bi-tonal resolution is set to 400 dpi. In both cases, attempting to start the scanner will result in a “Start scanning error” message being displayed.

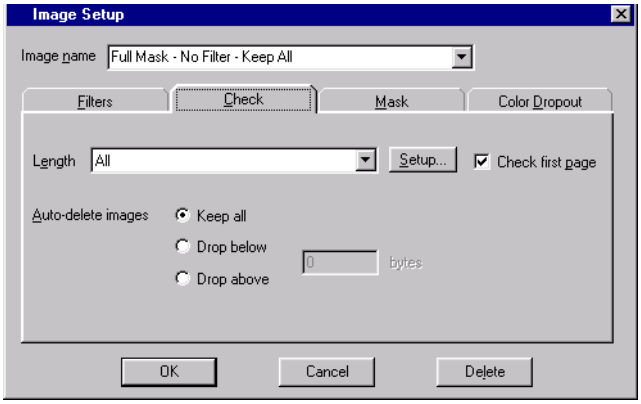
Filters tab for color and grayscale image setup



JPEG Quality — JPEG quality controls the amount of file compression performed by the scanner when producing JPEG images. Select **Draft, Good, Better, Best** or **Superior.** The Draft and Good settings increase image compression (resulting in smaller file sizes), but decreases image quality. The Best and Superior settings decrease image compression (resulting in larger file sizes), but improves image quality.

Color table — the selected color table affects how the scanner reproduces the color of a scanned document. Select a color table from the drop-down list. Use the **Photo** (or **Pictures**) table for scanning pictures and the **Text** table for text documents with color content. **Mixed** (or **Text with Pictures**) tables are recommended for documents that contain both text and pictures.

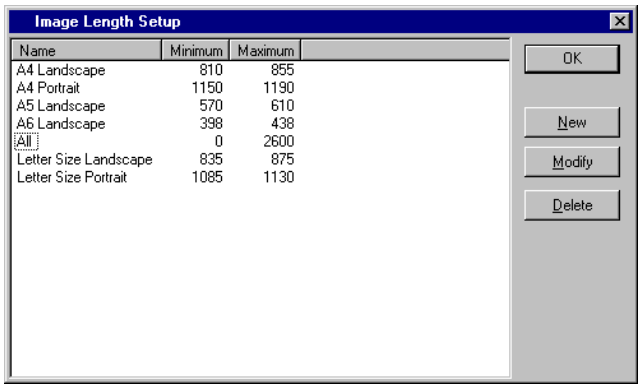
Check tab



Length — select a length type from the drop-down list. Capture Software checks the length of every scanned image and gives a warning (*Image too short* or *Image too long*) when the image length does not comply with the selected length type (i.e., is not between the minimum and maximum length). The length check is useful for detecting document double-feeds. Selecting **All** disables Length Check.

Setup — accesses the Image Length Setup dialog box. From this dialog box you can modify existing Length Check templates, create new ones, or delete Length Check templates.

NOTE: Minimum and maximum values are in 1/100-inch.



The Length Check is performed on the scanned image before auto-rotation and fine cropping and prior to any splitting or merging that may take place.

Disabling the Check First Page option is useful when you scan envelopes containing small transaction documents. Often the envelope is also scanned as a header sheet and because of its larger size you do not want to check the envelope's size (the first page of a document) to prevent false warnings.

NOTE: Length checking is not available for Capture Software Lite.

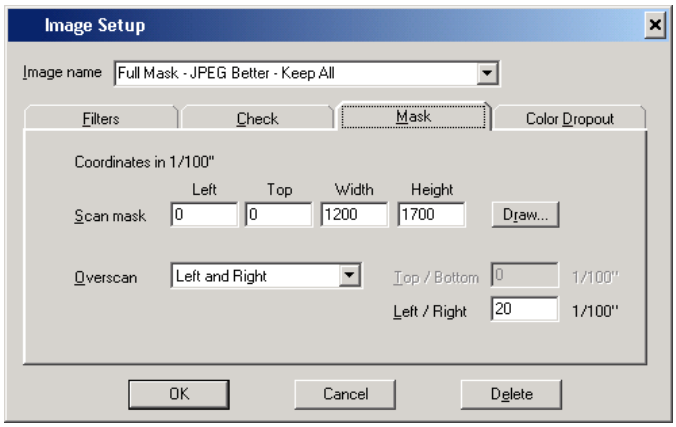
Auto delete images — allows you to discard images below or above a byte threshold during scanning. This is useful for automatically removing blank rear sides. The Auto-delete check is performed after any fine cropping, splitting, or merging that may take place.

NOTES: When dual-stream scanning, it is recommended that you define separate image setups for color, grayscale, and bi-tonal when auto-deleting images. This is because the byte threshold for blank bi-tonal images is much different from blank color and grayscale images.

A byte threshold of up to 1,000,000 bytes may be specified for blank color and grayscale images.

Mask tab

Mask coordinates define the area to be scanned. Each image (e.g., Front Bi-tonal, Rear Bi-tonal, Front Color, Rear Color) can have its own unique scan area. The Mask tab is only available when the Page Setup is defined for Fixed Cropping (i.e., scanner auto-crop is disabled) or Relative Cropping. When Fixed Cropping, the mask coordinates are measured relative to the top left corner of the scanner transport. When scanning using the platen (flatbed), the mask coordinates are measured relative to the reference arrow on the platen. When Relative Cropping, the mask coordinates are measured relative to the top left corner of the scanned document.



The Scan Mask can be manually keyed in or defined using the **Draw** function.

To define a Scan Mask manually:

1. Specify the **Left** value.
2. Specify the **Top** value.
3. Specify the **Width** value.

   For the i30 and i40 Scanners, the maximum width value is 8.77 inches (coordinate value: 877).

   For the i50/i55/i60/i65/i80 Scanners, the maximum width is 8.64 inches (coordinate value: 864).

   For all other *Kodak* Scanners, the maximum width value is 12 inches (coordinate value: 1200).

4. Specify the **Height** value.

   For the i30 and i40 Scanners, the maximum height value is 34 inches.

   For the i55 and i65 Scanners, the maximum height value is 34 inches for feeder scanning and 11.7 inches for flatbed scanning.

   For the i50/i60/80 Scanners, the maximum height value is 14.27 inches for feeder scanning and 11.7 inches for flatbed scanning.

   For the i100 Series Scanners, the maximum height value is 17 inches.

   For the i250/i260 Scanners, the maximum height value depends upon the amount of scanner memory installed in the scanner. When the scanner has the standard 64 MB of scanner memory, the maximum height value is 17 inches (coordinate value: 1700). When the scanner has 256 MB of extended scanner memory (up to 256 MB of optional memory may be installed in the scanner), the maximum height value is 26 inches (coordinate value: 2600).

   For the i280 Scanner, the maximum height value is 34 inches.

   For the i3500/4500 Series Scanners, the maximum height value is 26 inches.

   For i600 Series Scanners, the maximum height value is 34 inches.

   For i800 Series Scanners the maximum height value is 30 inches.

NOTES:

- The Left and Width fields combined cannot exceed the scanner's maximum width.
- The Top and Height fields combined cannot exceed the scanner's maximum height.
- The minimum width and height value is 1 inch (coordinate value: 100).
- When the Long Paper option is enabled for the i280 Scanner, the top field is forced to the value of 0 and is not accessible by the user.

Draw mask — opens a scan window. Scan one page and draw a mask on the image and click **OK**. Capture Software automatically calculates the mask parameters and enters the value in the Left, Top, Width, and Height fields. Depending on whether you are setting up the front/rear or bi-tonal/color/grayscale images, Capture Software displays the appropriate image coming from the scanner.

To draw a mask:

1. Click on the **Draw** button in the Mask tab. The Image Mask window appears.
2. Select **Scan** to show the image in which to apply the mask.
3. Using the mouse pointer, draw a rectangle over the area where you want the mask to be applied.
4. Click **OK**.

Overscan — allows you to add a specified value (in 1/100 in.) before and after the image edges. Overscan is used in applications where automatic feeding of highly skewed documents is likely. Overscan reduces the possibility of corner clipping on skewed images.

Select the type of overscan from the drop-down list: **None, Top and Bottom, Left and Right,** or **All Sides.** Specify an overscan value for both Top/Bottom and Left/Right, depending on the type(s) of overscan selected. A value from 0 to 37 may be specified. The default Overscan value is 0.

NOTES:

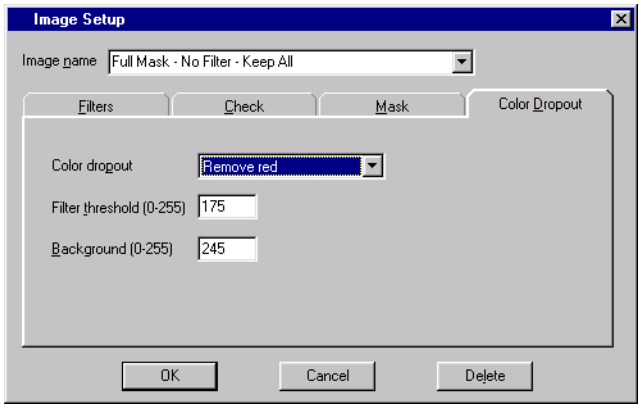
- *For i100 and i200 Series Scanners:* Overscan is only available for color or grayscale image setups. However, when bi-tonal-only scanning, the overscan setting as specified in the grayed-out Color image setup for the same side (front or rear) is still used and applied to bi-tonal images.
- The Overscan setting is not available for all scanners.

Color Dropout tab

Electronic Color Dropout is used to eliminate a form's background so that a document management system may automatically (through OCR and ICR technology) read pertinent data without interference from the lines and boxes of the form. The Color Dropout tab allows you to select the desired dropout color (Red, Green, or Blue) and alter the filter threshold and background.

NOTES:

- Electronic Color Dropout is not available for 3500/4500 Series Scanners.
- Color Dropout is not available for color image setup.
- For the i600 and i800 Series Scanners, Color Dropout is only available for bi-tonal image setup.



Color dropout — select the color to be removed. Select **None** if you do not want any color to be removed.

For example, if your image contains red text or a red background, choose **Remove red** to remove the red text or red background.

Filter threshold — enter a value between 0 and 255. The default is 175. Filter threshold is the value that is used to identify the color which will be dropped out. This value is applied to the color space.

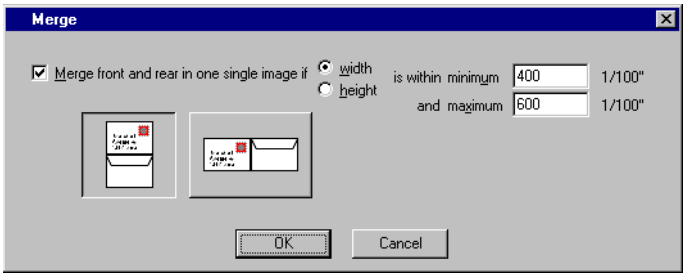
Background — enter a value between 0 and 255. The default is 245. This value will be substituted in the grayscale (pre-thresholded) image for the color being removed. Therefore, this value should be higher than the threshold value selected on the Filters tab for this pixel to become the background color. For example, if you are scanning a white document with a green form and you have selected a bi-tonal threshold value of 127. You should pick an electronic color drop-out background value greater than 127 so the substituted pixel will be white in the dropped-out image.

Using the Merge and Split options

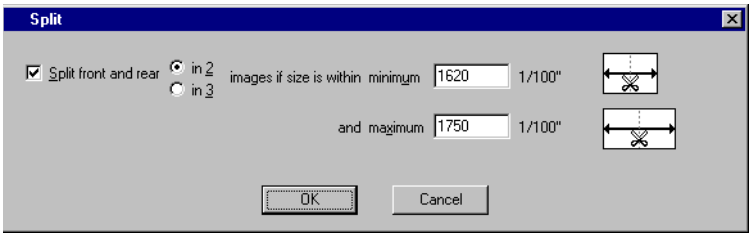
The Page Setup dialog box provides you with the option of merging and splitting images. The Merge and Split options are for bi-tonal images only and are not available with *Kodak* Capture Software Lite.

Following is a description of each option and how to use it for all Kodak scanners.

Merge — click on the Merge icon in Page Setup to combine the front and rear image into one image (for instance front and rear of a check becomes one image). The merge only takes place for images complying with the minimum and maximum width or minimum and maximum height expressed in 1/100-inch. Images that do not comply with the width or height parameters remain untouched. Merge is useful when you need to see the front and rear (i.e., of a check) in one viewer to verify OCR accuracy or perform manual data entry. Merge can be done either vertically (front image on top of rear image) or horizontally (front image and rear image side-by-side).

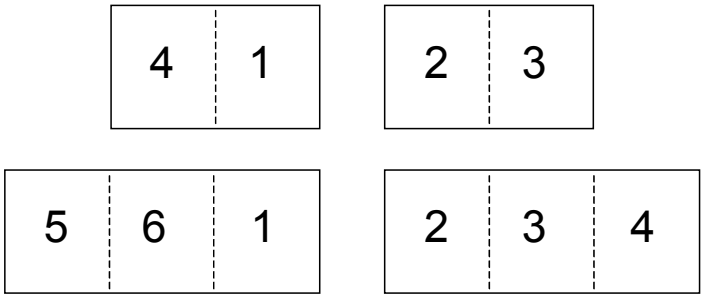


Split — click on the Split icon in Page Setup to convert the front and rear image in two or three images. The application is related with forms processing where forms are often folded and need to be split in several smaller images to make forms registration and verification more reliable. Capture Software also sorts the split images and extracted data from these images in the correct sequence.



The split occurs only on pages complying with a minimum and maximum size expressed in 1/100-inch. The split operation is a vertical split, meaning that the page is divided into equal left, middle, and right portions (if splitting three ways). The split occurs after rotation, and for large forms that cannot be scanned in landscape mode because they are greater than 12 inches wide, rotation is required.

If you use the Split option, the documents must be folded according to the following folding schemes:



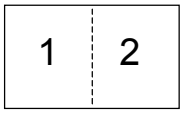
When splitting images, Capture Software always assumes the first image (image 1 in the diagram above) is on the front after scanning. If, during scanning, the first image is on the rear side, be sure to change the **image order** in Page Setup to Bi-tonal rear; Bi-tonal front.

Set the Auto-Rotate option (at the top of the **Page Setup** dialog box) correctly depending on how you scan the document.

After split, images 1, 3, and 5 will be considered front images and images 2, 4, and 6 will be considered rear images.

Because Capture Software immediately shows the result after merging or splitting, you can test your page setup and make changes if necessary.

NOTE: If you are scanning in simplex mode (or when you are scanning from the flatbed, the split will occur only on the front image. Only a two-image split is supported with the with the following folding scheme:

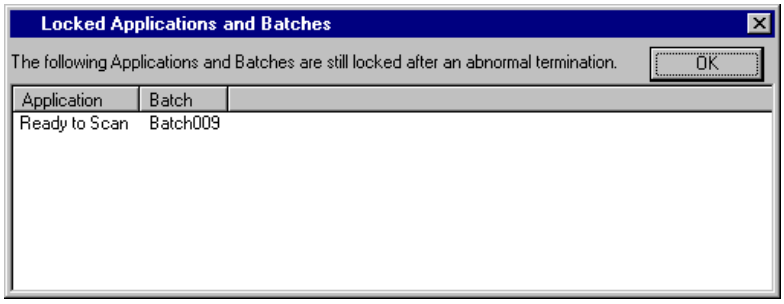


Both image 1 and image 2 will be considered front images.

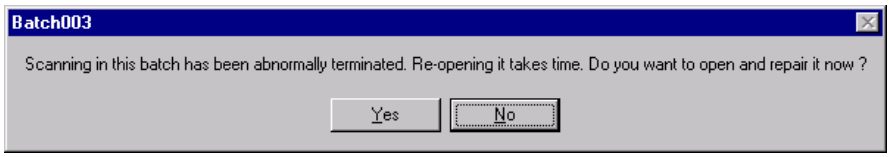
10 Recovery Procedure

If Capture Software or the scanning PC shuts down or terminates abnormally while scanning a batch, Capture Software will recover and repair the batch at the time Capture Software is restarted and the batch is reopened.

When restarting Capture Software, the Locked Applications and Batches dialog box appears with any batches that were open at the time of the abnormal termination.

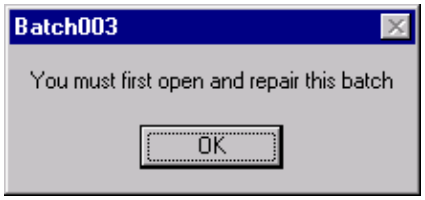


When opening an abnormally terminated batch, the following message appears in Capture Software.


Batch003
Scanning in this batch has been abnormally terminated. Re-opening it takes time. Do you want to open and repair it now ?
Yes
No

- Click **Yes** to repair and open the batch. All pages that were successfully scanned, processed, and displayed by Capture Software should still exist in the batch. Pages that were scanned, but not processed and displayed by Capture Software must be rescanned.

If you do not reopen and repair the affected batch upon restarting Capture Software, you can open existing batches, create new batches, and resume scanning within any application including the application that contains the affected batch. However, if you attempt to run Application Setup for the application that contains the affected batch, the following message appears in Capture Software.



In the sample message box, Batch003 is the batch that needs to be repaired first.

11 System Administration

Program Properties

Any Capture Software user who has Administrator privileges can access the Program Properties dialog box to change any of the following settings.

Multi-user path — specifies a folder/subdirectory on a server to share applications and page templates by several computers with Capture Software installed.

NOTES: Before changing your multi-user path, Capture Software first checks whether the specified subdirectory has already been established as a multi-user path. This is indicated by the existence of an MVCS.LCK file in the subdirectory. If the subdirectory is not a multi-user path, a message appears with the option of continuing or canceling the changing of the multi-user path.

Capture Software will not copy or move applications and page templates to the new multi-user path. Any applications or page templates in the old multi-user path still remain. It is recommended that you uninstall Capture Software and then re-install it, specifying the new multi-user path at installation time instead of changing the multi-user path in System Administration.

Workstation name and ID — enter a unique workstation name and ID for each computer that has Capture Software installed.

Disk Space warning level — Capture Software warns you whenever the amount of free hard disk space falls below this warning level. Enter the number of Mbytes for the warning level.

Font size — choose a font size for the Scanner bar, Document Title bar, Image Title bar, and Status bar.

User profiles — sets up users and user groups. See the section entitled “User profiles” for more information.

NOTE: User profiles are not available for Capture Software Lite.

Demonstration mode — should always be enabled when you run Capture Software without an attached hardware key. When you use a production CD to upgrade Capture Software from the Demonstration version to production, you must uncheck the box to disable Demonstration mode.

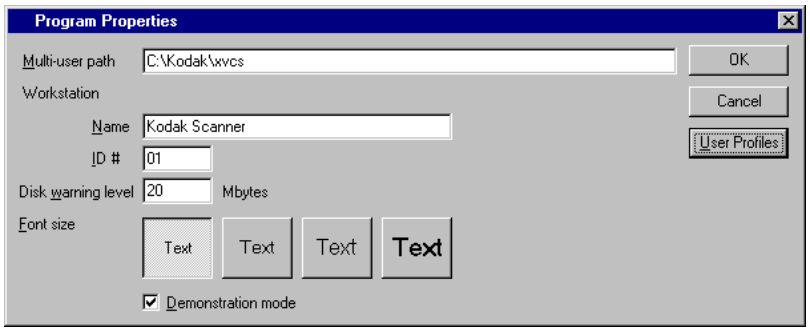
NOTES: Capture Software Lite does not require a hardware key to run in production. However, features not supported by Capture Software Lite (e.g., bar code reading, OCR indexing, etc.) can be demonstrated by enabling Demonstration mode.

When you change the Demonstration mode setting, Capture Software automatically closes. You must restart Capture Software in order for the setting to take effect.

To access the Program Properties dialog box:

1. From the Capture Software main menu, select **File>Properties**.

   The Program Properties dialog box appears.



NOTES: Program properties can only be accesses by users with Administrator privileges. By default, Capture Software is configured with two users (SysAdmin and xxxxx), both of which have Administrator privileges.

At least one user must have Administrator privileges. Capture Software does not allow User Profiles to be set up without at least one user having Administrator privileges.

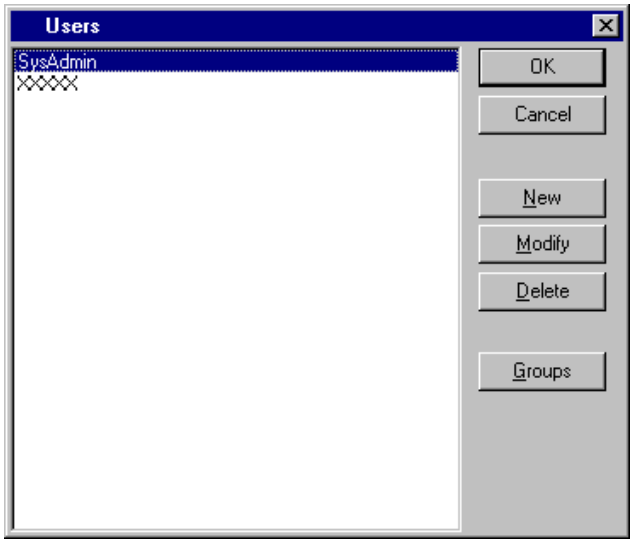
2. Set any of the desired values.
3. Click **OK** when finished.

User profiles

Users and user groups can be configured in Capture Software to limit access to specific applications and Capture Software functions (e.g., Application Setup, Crop and Blank tools, etc.).

NOTE: User profiles are not available for Capture Software Lite.

- Click on the **User Profiles** button to set up users and user groups. A list of users appears.



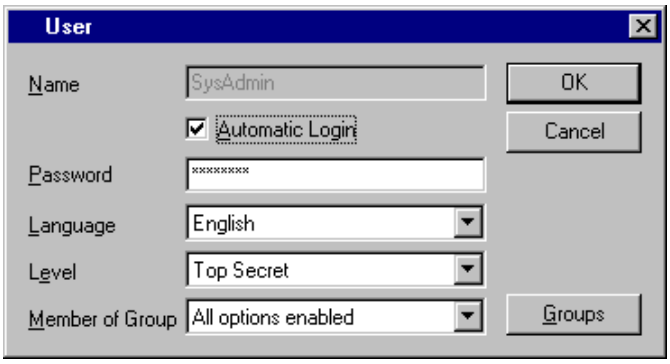
A user must be a member of a group. Groups contain the actual privileges that enable or disable access to Capture Software functions and applications. By default, Capture Software is configured with two users (“SysAdmin” and “xxxxx”) that are members of the **All options enabled** group. This group has privileges for all Capture Software functions and applications.

NOTES: The default passwords are “SysAdmin” for SysAdmin and “xxxxx” for xxxxx.

Up to 100 users and user groups can be defined in Capture Software.

To modify a specific user’s profile:

1. Highlight the user name.
2. Click **Modify**. The user’s profile appears.



To disable User Profiles, a user can be set up as an **Automatic Login**.

When Automatic Login is checked, no login prompt appears when Capture Software is started. Capture Software automatically logs in as the user who is configured for automatic login. The privileges of the user group in which the user is a member are adopted any time Capture Software is started.

NOTES: By default, Capture Software is configured with SysAdmin as an automatic login.

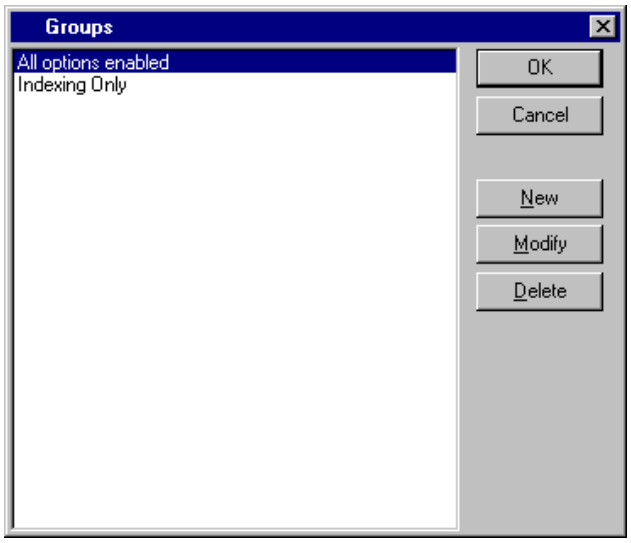
Only one user can be configured for automatic login.

When users are added in User Profiles, the automatic login is automatically disabled. To reinstate the automatic login, an administrator must manually modify a user’s profile.

User groups

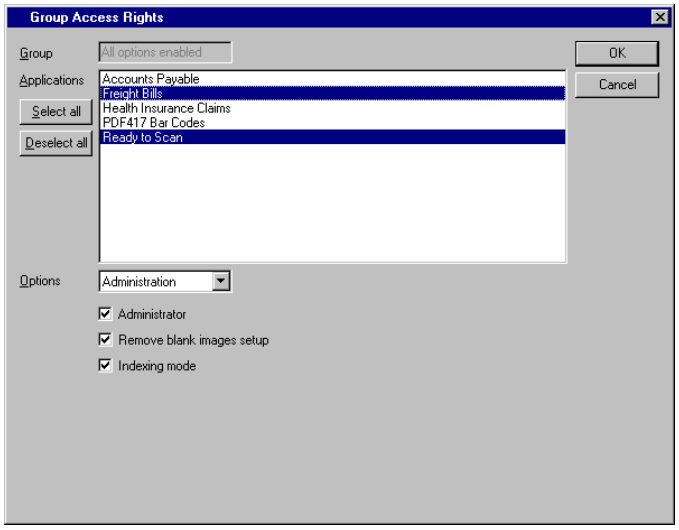
To set up a user group:

- Click **Groups**. A list of groups appears.



To modify a group's privileges and application access:

1. Highlight the group name.
2. Click **Modify**. The group's profile appears.



Application access

Highlight the application(s) for which you want to grant access. To remove a group's access to a specific application, deselect the application by removing the highlighting.

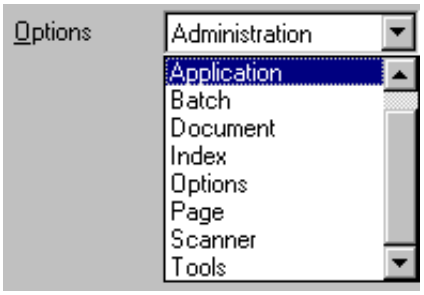
NOTES: Application access can only be provided for Production applications. Template application access is provided by the Administrator privilege under Administration options.

When a new application is created, it is automatically accessible by all user groups. To disable access to a new application, you must modify the appropriate user groups.

Click **Select all** to highlight all applications. Click **Deselect all** to deselect all applications.

Function privileges

Access to Capture Software is provided through the **Options** drop-down list.



Each option category has a separate set of user privileges to which access can be enabled or disabled. When the check box is checked, the privilege is enabled. When the check box is not checked, the privilege is disabled.

NOTE: At least one Capture Software user must be a member of a group that has the Administrator privilege enabled (in Administration options).

Logging in using network user names

If your PC office environment has a secure network where users are required to log on to their PCs to gain access to network resources and applications, you may want to take advantage of the **Network User Login** feature of Capture Software.

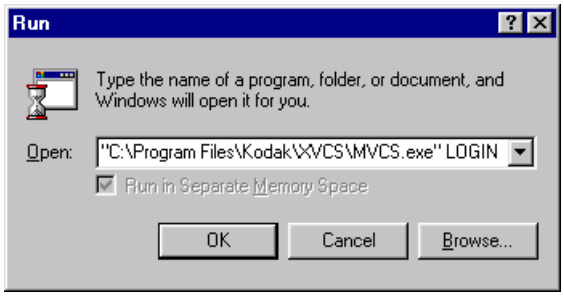
This feature allows the network user to automatically log into Capture Software as their network user name without having to re-enter their network user name from the Capture Software Login screen.

To enable **Network User Login**, you must invoke Capture Software from a command prompt or a short cut definition that has the word **LOGIN** (must be in capital letters) on the command line. The Capture Software executable (**MVCS.EXE**) is located by default in the Program Files directory where your version of Capture Software is installed.

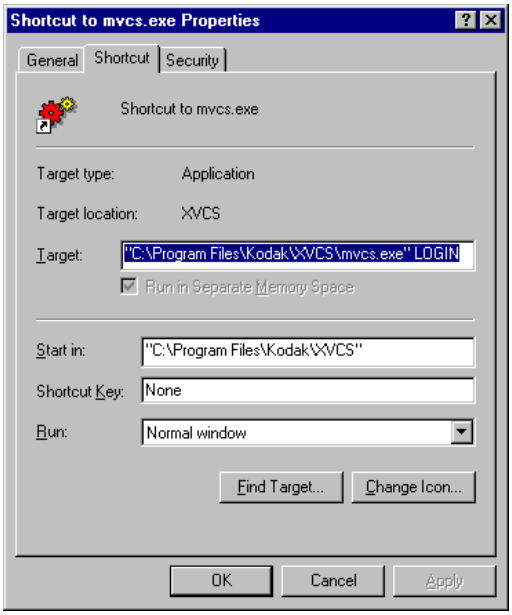
- For example: **C:\Program Files\Kodak\XVCS**

For example:

- Invoking Capture Software from the **Run** option of the Windows **Start** menu:



- Shortcut to enable Capture Software **Network User Login**:



When **LOGIN** is on the command line, Capture Software searches the User Profiles list using the network user name. If the network user name exists, the user is automatically logged into Capture Software as that user, inheriting their user group's function and application privileges. The password of the User Profile in Capture Software is ignored and, therefore, can be anything.

IMPORTANT: Each user who will be running Capture Software must have an entry in the Capture Software User Profiles in order to automatically log in as that user.

If the network user name does not exist in the User Profiles list, the Capture Software Login screen will be displayed requiring the user to log in to Capture Software manually.

To log in as a specific user from the command line, follow the word LOGIN by keying in a specific user name.

For example, if User 17 is the user name, enter:

“C:\Program Files\Kodak\XVCS\MVCS.exe” LOGIN **User17**

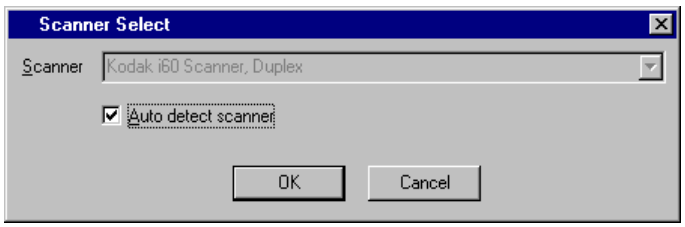
Appendix A *Kodak* i30/i40/i55/i65 Scanners: Specific Information

This appendix provides information that is pertinent to the *Kodak* i30/i40 and i55/i65 Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual.

Selecting the scanner

Select the scanner you want to use by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box appears.



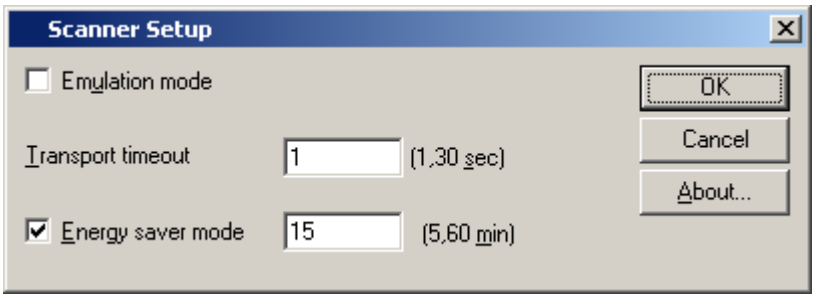
   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the **Scanner** drop-down list.

   When running in emulation mode, changing the scanner model changes the scanner you are emulating.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

Setting up the scanner

You can set up or change the parameters of the scanner by accessing the Setup dialog box.



Emulation mode — enable this checkbox to run Capture Software in emulation mode without a scanner attached. For more information about emulation mode, see the *Installation Guide for Capture Software.*

NOTE: If the Emulation mode setting is changed, you need to exit and restart Capture Software in order to scan successfully.

Transport timeout — when enabled, the scanner transport and feeder will automatically stop after a specified number of seconds of no scanning. Valid values are 1 to 30 seconds. When a time-out occurs, the scanner transport stops and is disabled.

Energy Saver mode — check this option to enable Energy Saver mode. Enabling this option reduces power consumption after a specified number of minutes of scanner inactivity. Valid values are 5 to 60 minutes.

When Energy Saver mode is in effect, the green indicator light on the scanner blinks. To “wake” the scanner out of Energy Saver mode, any type of scanner activity must be initiated from Capture Software. This includes starting Capture Software or starting the scanner from within Capture Software. The scanner will take approximately one minute to fully wake (the green indicator light no longer blinks).

When Energy Saver mode is disabled, the scanner remains ready to scan, no matter how long it is inactive.

Image Setup properties

Following is a description of the options that are exclusive to the i30/i40 and i55/i65 Scanners.

Image Edge tab

The Image Edge feature is used to flip black background and edges to white on any scan window (bi-tonal, color or grayscale; front or rear). When scanning in black and white, it can be used to ”clean up” the image edges such that the entire background is white.

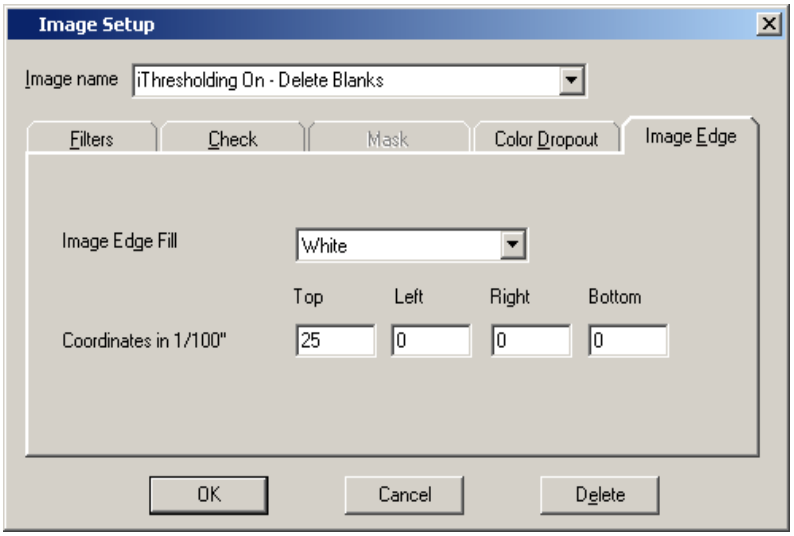


Image Edge Fill

- Select **White** to change all pixels in the specified image edges to white.
- Select **Black** to change all pixels in the specified image edges to black.
- Select **None** to disable the Image Edge feature of the scanner.

For each image edge, **Top, Left, Right, Bottom**, specify the amount of image edge fill that will be performed. Values entered are in 1/100th of an inch. In the example screen above, only the Top 1/4-inch of each image will be changed to white.

NOTE: Image Edge does not change the dimensons of the image. It only changes the pixels in the image’s background.

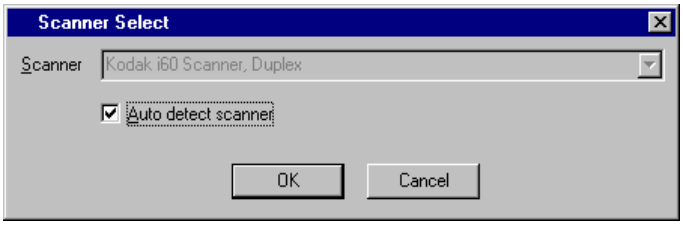
Appendix B *Kodak* i50/i60/i80 Scanners: Specific Information

This appendix provides information that is pertinent to the *Kodak* i50/i60/i80 Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual.

Selecting the scanner

Select the scanner you want to use by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box appears.



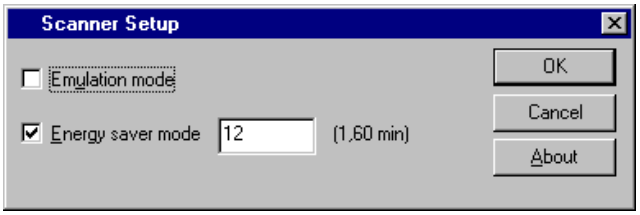
   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the **Scanner** drop-down list.

   When running in emulation mode, changing the scanner model changes the scanner you are emulating.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

Setting up the scanner

You can set up or change the parameters of the scanner you will be using by accessing the Setup dialog box.



Emulation mode — enable this option to run Capture Software in emulation mode without an attached scanner. For more information about emulation mode, see the *Installation Guide for Capture Software.*

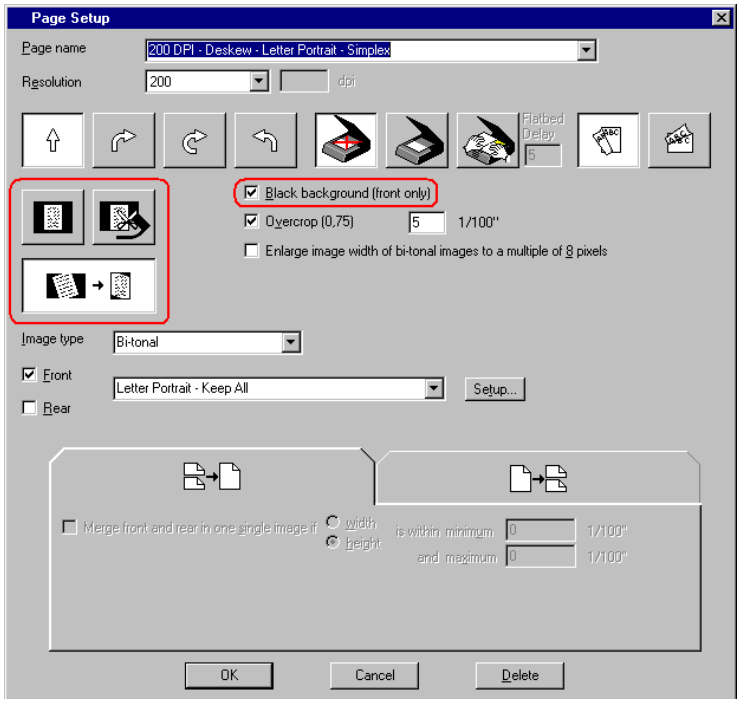
NOTE: If the Emulation mode setting is changed, you may need to exit and restart Capture Software in order to scan successfully.

Energy saver mode — check this option to enable Energy Saver mode. Enabling this option will automatically shut the lamps off after a specified number of minutes of scanner inactivity. Valid values are 1 to 60 minutes.

About — displays information about the attached scanner.

Page Setup Properties

Following is a description of the options that are exclusive to the i50/i60/i80 Scanners. Most of the options on this dialog box are described in Chapter 9, *Setting up Page Properties*, (i.e., rotation and platen options, classic and calendar modes, etc.)



NOTE: The options circled in red (above) are only available with the i80 Scanner.

Black background (front only) — scans documents against a black background instead of a white background. Enabling this option allows the Capture Software auto-crop and deskew options to be performed on scanned images.

NOTE: A black background is produced only on front side images. Rear side images always have a white background.

Auto crop and deskew options:

	Disable black border removal and deskew — no auto-crop or deskew takes place. The settings in the Mask tab of Image Setup (see Chapter 9, *Setting up Page Properties*) determine the image produced by the scanner.
	Remove black borders — the image is auto-cropped. Black borders around the image are removed. No deskew takes place.
	Remove black borders and deskew — the image is auto-cropped and deskewed. If the image skew is high and corners are lost during scanning, Capture Software will fill in the missing corners. For front side images, missing corners are filled with black. For rear side images, missing corners are filled with white.

NOTES:

- To maximize the performance of scanning when auto-crop and deskew are enabled, make sure that you configure the image setup to have a scan mask set to the largest physical page size of the document set to be scanned (to do this, set the Length setting in the Mask tab to the largest page size). For example, if you are scanning a stack of checks and the scan mask is set to Letter Portrait, then the i80 Scanner's performance is essentially the same as if the scanner were scanning a stack of letter-size pages. Specifying the length of the check document in the Length setting in the Mask tab will significantly increase the scanner's performance.
- When duplex scanning with the i80 Scanner, rear images that have been auto-cropped and deskewed may be slightly shifted to the left or right (i.e., white padded on one side and truncated on the other side). This shift, if it is present, is due to slight variations in the alignment of the front and rear cameras of the i80 Scanner. If the shift is more pronounced and is causing noticeable loss of image content, contact your local Kodak Service Representative for service on your *Kodak* i80 Scanner.
- If the page setup is configured for rear-side scanning only, auto crop and deskew will not work. This is because rear-side auto crop and deskew is based on the results of auto-cropping and deskewing the front-side image. Without a front-side image, auto crop and deskew cannot be applied to the rear side.

Overcrop — removes or appends additional pixels to all sides of an auto-cropped image. Enter the amount of overcrop in 1/100 of an inch (-75 to 75).

NOTES: Since auto-cropping is not available in Capture Software for i50/i60 Scanners, Overcrop is not available for i50/i60 Scanners.

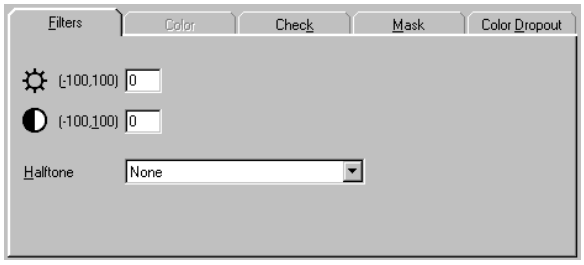
Image types — bi-tonal, color, and grayscale image types are supported. Color images are 24-bit. 8-bit color is not supported in Capture Software. Color and grayscale images are stored as JPEG compressed images.

Front and/or Rear — check **Front** and/or **Rear** for the side(s) of the pages you want scanned. For duplex scanning, check both. For simplex scanning, select either **Front** or **Rear**. Capture Software uses the same image setup for both the front and rear sides of a page.

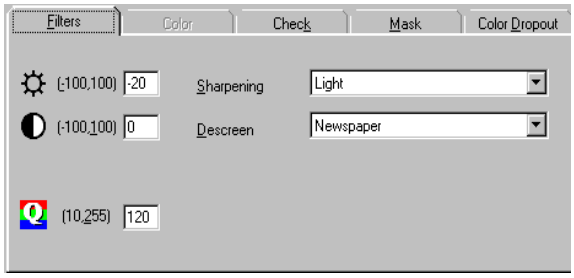
Image Setup Properties

Filters tab

The Filters tab is different depending on the image type selected. The JPEG Quality, Sharpening, and Descreen options are available only when scanning in color or grayscale.



Filters tab (bi-tonal scanning)



Filters tab (color and grayscale scanning)

Threshold — threshold controls the lightness and darkness of the background in an image. As the threshold value increases, more of the darker grays in the image turn black. As the threshold value decreases, fewer darker grays turn black. Enter a value between -100 and 100.

The larger the number, the darker the image. A darker setting is recommended for documents containing blurred characters. A lighter setting will eliminate background noise in a color document.

NOTE: When scanning in color or grayscale with auto-crop and deskew enabled, a Threshold setting of 10 or higher is recommended to obtain the best results.

Contrast — contrast adjusts the differences between black and white, making an image sharper or softer. Decreasing the contrast level softens the image. In a high-contrast setting, the difference between black and white is large, so the image is clearer. Enter a value between -100 and 100.

Halftone — select a setting from the drop-down list to simulate grayscale by using various dot sizes. If you view a halftone image at a certain distance, it looks much like a grayscale image, but the file size is smaller. You can specify **None, Halftone 1, Halftone 2, Halftone 3, Halftone 4,** or **Diffusion.**

Sharpening — select a setting from the drop-down list to sharpen the scanned image. You can specify **None, Light, More, Heavy,** or **Extra Heavy**.

Descreen — select a setting from the drop-down list to specify the type of document you are scanning in order to eliminate the moire pattern (an undesirable pattern resulting from the incorrect screen angle of the overprinting halftone) commonly found in printed material. You can specify **None, Newspaper, Magazine,** or **Catalog**.

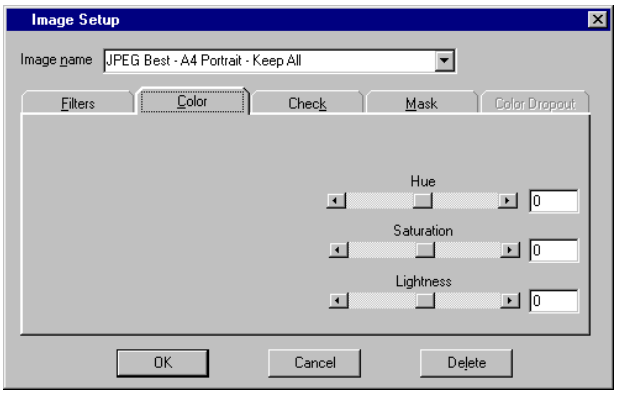
JPEG Quality — controls the amount of file compression performed by Capture Software when producing JPEG images. Enter a value between 10 and 255. A higher setting increases image compression (resulting in smaller file sizes), but decreases image quality. A lower setting decreases image compression (resulting in larger file sizes), but improves image quality. The following settings can be used as guidelines.

Image Quality	Setting
Good	60
Better	40
Best	25

NOTE: If you are planning to batch output color or grayscale images uncompressed using the “Uncompress images” batch output format, use a JPEG Quality setting of 10 to minimize the amount of JPEG loss when compressing and then decompressing color/grayscale images.

Color tab

The Color tab is available only when the Color image type is selected.



Hue — specify a value in the Hue text box or click and drag the slider bar to adjust the hue to a value from -180 to 180.

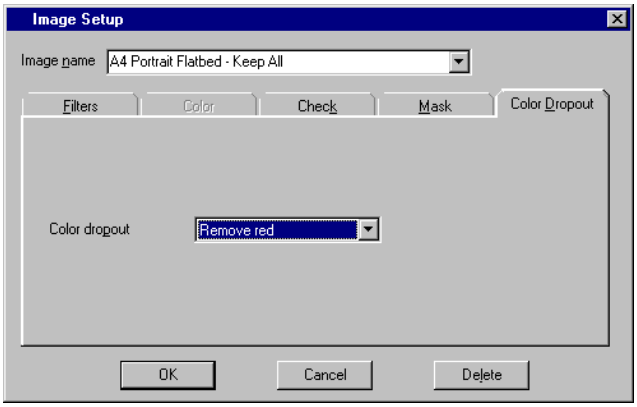
Saturation — specify a value in the Saturation text box or click and drag the slider bar to adjust the saturation of the color. The level of saturation indicates whether the color is pale or deep. Valid values are -100 to 100.

Lightness — specify a value in the Lightness text box or click and drag the slider bar to adjust the color strength. Valid values are -100 to 100.

Color Dropout tab

Electronic Color Dropout is used to eliminate a form's background so that a document management system may automatically (through OCR and ICR technology) read pertinent data without interference from the lines and boxes of the form. The i50/i60/i80 Scanners can drop out either red, green, or blue. The Color Dropout tab allows you to select the desired dropout color.

Color Dropout is only available for bi-tonal and grayscale image setups.



Color dropout — select the color to be removed. Select **None** if you do not want any color to be removed.

For example, if your image contains red text or a red background, choose **Remove red** to remove the red text or red background.

Tip: Adjusting the Threshold and Contrast settings may be required to improve color dropout and, therefore, overall image quality (i.e., to completely remove the background color).

Appendix C *Kodak* i100/i200 Series Scanners: Specific Information

This appendix provides information that is pertinent to the *Kodak* i100 Series Scanners and *Kodak* i200 Series Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual.

Creating a new batch with Document Printing enabled

If Document Printing is available for your i200 Series Scanner and enabled in Application Setup, the Set Counter dialog box appears when you create a new batch.

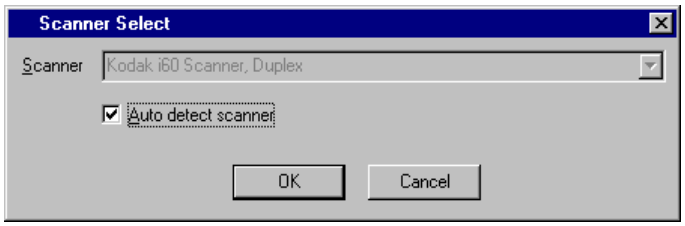
- Enter a starting counter number. The number will be downloaded and enabled on the first scanned page.

Capture Software keeps track of the counter across scanned batches and will suggest a starting counter equal to the counter of the last scanned page + 1. When Capture Software is restarted, the suggested starting counter is reset to "1".

Selecting the scanner

Select the desired scanner by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box appears.



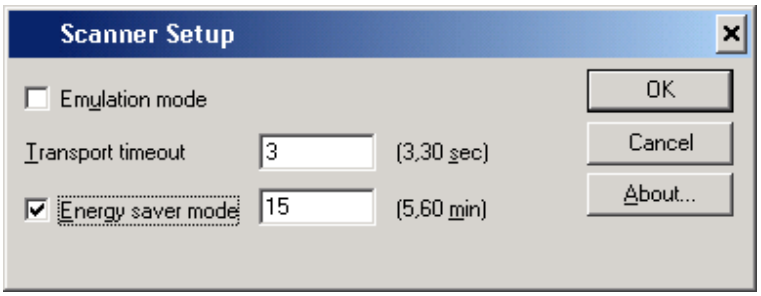
   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the **Scanner** drop-down list.

   When running in emulation mode, changing the scanner model changes the scanner you are emulating.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

Setting up the scanner

You can set up or change the parameters of the scanner by accessing the Setup dialog box.



Emulation mode — enable this checkbox to run Capture Software in emulation mode without a scanned attached. For more information about emulation mode, see the *Installation Guide for Capture Software.*

NOTE: If the Emulation mode setting is changed, you need to exit and restart Capture Software in order to scan successfully.

Transport timeout — when enabled, the scanner transport and feeder will automatically stop after a specified number of seconds of no scanning. When a time-out occurs, the scanner transport stops and is disabled. Valid values are 3 to 30 seconds

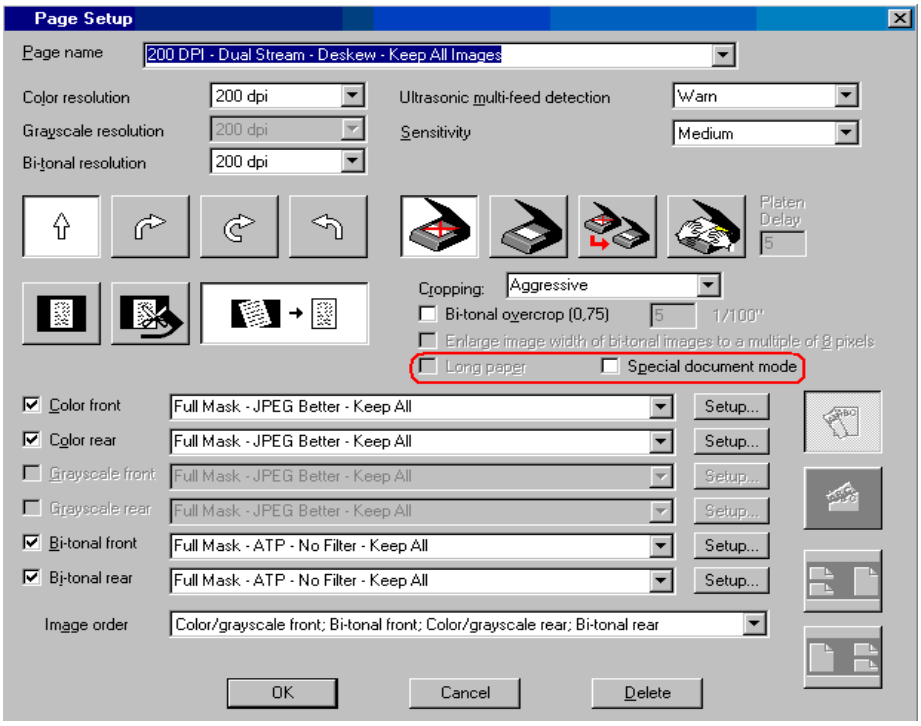
Energy Saver mode — check this option to enable Energy Saver mode. Enabling this option reduces power consumption after a specified number of minutes of scanner inactivity. Valid values are 5 to 60 minutes for i100 Series Scanners and 15-60 minutes for i200 Series Scanners.

When Energy Saver mode is in effect, the green indicator light on the scanner blinks. To “wake” the scanner out of Energy Saver mode, any type of scanner activity must be initiated from Capture Software. This includes starting Capture Software or starting the scanner from within Capture Software. The scanner will take approximately one minute to fully wake (the green indicator light no longer blinks).

When Energy Saver mode is disabled, the scanner remains ready to scan, no matter how long it is inactive.

Page Setup Properties

Following is a description of the options that are exclusive to the i100/i200 Series Scanners. Most of the options on this dialog box are described in Chapter 9, *Setting up Page Properties*.



NOTES:

- The options circled in red (above) are only available for the i280 Scanner.
- **Scanning Resolution *(for i200 Series Scanners)*:** To achieve the best possible throughput when scanning at 300 dpi or higher, it is highly recommended that you upgrade the i250/i260 Scanner memory from 64 MB to 256 MB. The i280 Scanner comes standard with 256 MB of memory. Refer to the *Kodak* i200 Series Scanners User's Guide for information about installing memory.
- **Ultrasonic Multi-feed Detection:** When **Warn and Stop** is selected, the scanner feeder and transport stop immediately when a multi-feed is detected. You must open the scanner and remove the multi-feed sheets, then restart the scanner from Capture Software before you can resume scanning.

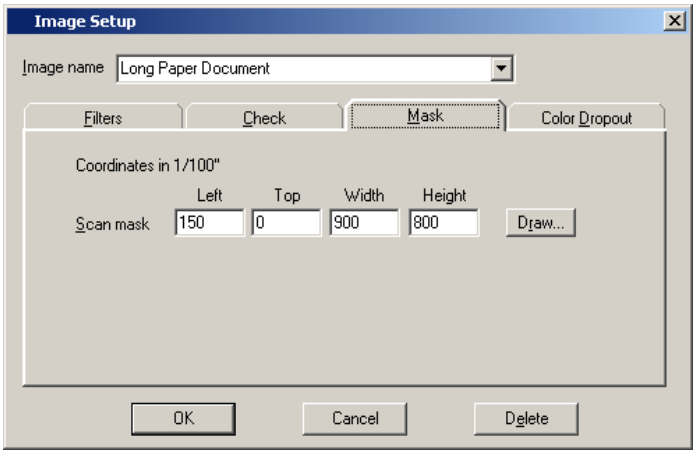
Long Paper *(for i280 Scanner only)* — select this option when scanning documents that are longer than 34 inches. This option is only available when Auto-crop and Deskew are disabled.

When enabled, the scanner (when started) scans the scroll of paper continuously until there is no more paper. As it is scanning, the continuous image stream is divided into individual images based on the settings on the Mask tab on the Image Setup dialog box. For instance, if a 100-inch long document is scanned and the Height value on the Mask tab is set to a value of 10 inches, then the scanner will produce 10 images each 10 inches long.

NOTES:

- As long as the host computer can keep up with the continuous scanning of long paper, the maximum size paper that can be scanned, essentially has no limit.
- As the long paper may shift in the transport and skew during scanning, it is recommended to account for this movement when specifying the Left and Width settings on the Mask tab. In addition, a residual image of very small size may be left over at the end of scanning.
- When scanning Long Paper in duplex or dual-stream mode, it is highly recommended that the Mask tab settings for each Image Setup be identical, otherwise, unpredictable results may occur.

IMPORTANT: When scanning in Long Paper mode at high resolution color (i.e., 200 dpi or above), it is highly recommended to keep the length of each image segment (as specified in the Mask tab on the Image Setup dialog box) as small as possible.



By default, the length (or Height setting) in the Image Setup provided by Capture Software is set to 34 inches (i.e., the scanner maximum). Leaving the Height setting at 34 inches (setting of 3400) when scanning high resolution color will likely result in the inability of the scanner to completely and successfully scan long documents.

Special Document mode (*i280 Scanner only)* — select this option when scanning documents that require special handling by the scanner. Special document mode was designed to scan non-rectangular documents and documents with holes in them, such as, oil well logs. Auto-crop and Deskew can still be performed.

When Special Document mode is enabled, the scanner runs about 25% slower.

Appendix D *Kodak* i600 Series Scanners: Specific Information

This appendix provides information that is pertinent to the *Kodak* i600 Series Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual.

Creating a new batch with Document Printing enabled

If Document Printing is enabled in Application Setup, the Set Counter dialog box is displayed:

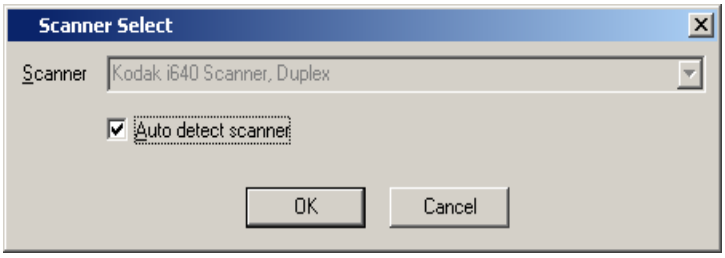
- Enter a starting counter number. The number will be downloaded and enabled on the first scanned page.

Capture Software keeps track of the counter across scanned batches and will suggest a starting counter equal to the counter of the last scanned page + 1. When Capture Software is restarted, the suggested starting counter is reset to "1".

Selecting the scanner

Select the scanner you want to use by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box is displayed.

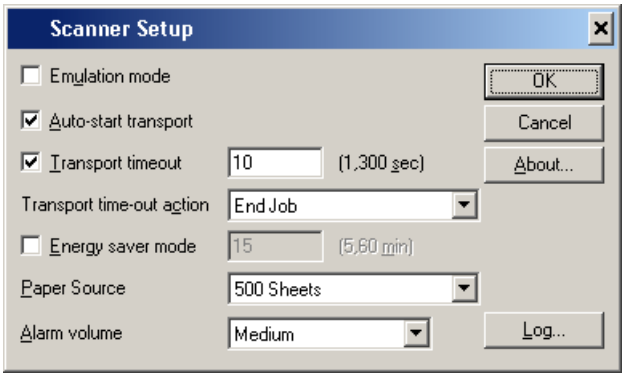


   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the Scanner drop-down list.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

Scanner Setup

You can set up or change the parameters of the scanner by accessing the Scanner Setup dialog box.



Emulation mode — enable this checkbox to run Capture Software in emulation mode without a scanner attached. For more information about emulation mode, see the *Installation Guide for Capture Software.*

NOTE: If the Emulation mode setting is changed, you need to exit and restart Capture Software in order to scan successfully.

Auto-start transport — starts the transport and feeder automatically when the Start Scanner button is selected in the main window of Capture Software. By default, this setting is enabled. If disabled, you must press the green button on the scanner operator control panel to initial scanning.

Transport timeout — when enabled, the scanner transport and feeder will automatically stop after a specified number of seconds of no scanning. Valid values are 1 to 300 seconds. When Transport timeout is disabled, the transport and feeder remain on until the scanner is disabled or the Stop/Pause button is pressed on the scanner operator control panel.

Transport time-out action provides two options:

- **End job:** stops the transport and feeder and disables the scanner. Scanning must be reinitiated from Capture Software.
- **Stop feeder and transport:** stops the transport and feeder, but leaves the scanner enabled. Scanning can be reinitiated by pressing the green button on the scanner operator control panel.

Energy Saver mode — enables/disables Energy Saver mode. Enabling this option reduces power consumption after a specified number of minutes of scanner inactivity. Valid values are 5 to 60 minutes.

When Energy Saver mode is in effect, the green indicator light on the scanner blinks. To “wake” the scanner out of Energy Saver mode, any type of scanner activity must be initiated from Capture Software. This includes starting Capture Software or starting the scanner from within Capture Software. The scanner will take approximately one minute to fully wake (the green indicator light no longer blinks).

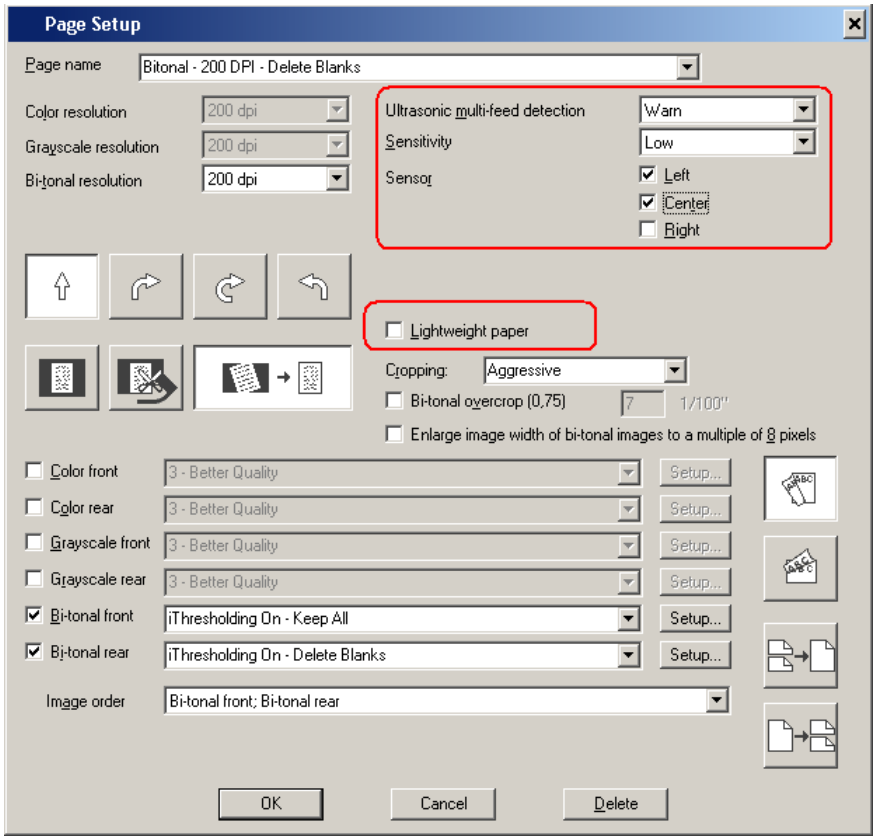
When Energy Saver mode is disabled, the scanner remains ready to scan, no matter how long it is inactive.

Paper source — indicates whether or not the scanner will run in continuous-feed mode (**ADF**) or in elevator mode (**100 sheets**, **250 sheets**, or **500 sheets**). In elevator mode the scanner transport will drop to the specified elevator position upon exiting Scanner Setup. When **ADF** is selected, the transport will rise to the continuous feed position upon exiting Scanner Setup.

Alarm Volume — allows you to adjust the volume of the alarm that is sounded when the scanner encounters a multi-feed, color toggle patch, etc. Choices are: (none), Low (quietest), Medium, or High (loudest).

Page and Image Setup Properties

Following is a description of the options that have unique settings or are exclusive to the i600 Scanners. Most of the options on this dialog box are described in Chapter 9, *Setting up Page Properties*. (i.e., rotation, classic and calendar modes, etc.)



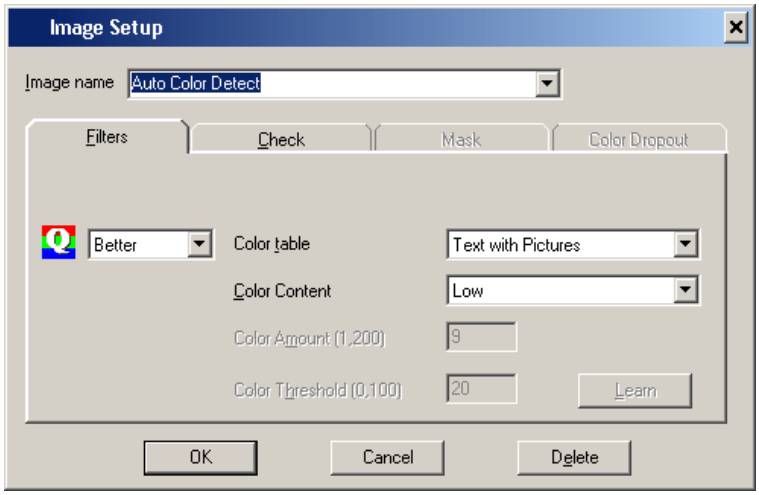
Lightweight Paper — when selected, the scanner will increase the gap between documents allowing each document to settle in the output tray before the next document leaves the transport improving output stacking when scanning lightweight paper. Using this option decreases overall throughput.

Ultrasonic Multi-feed Detection — when **Warn and Stop** is selected, the scanner feeder and transport stop after feeding the page that caused the multi-feed. You must restart the scanner from Capture Software before you can resume scanning.

Sensor — there are three ultrasonic sensors that cover the width of the transport. When **Ultrasonic multi-feed detection** is enabled, you can choose which of the sensors (**Left, Center, Right**) are enabled/disabled. For example, if you know that the right side of the document has a Post It™ note on it, you can disable the right sensor. This will prevent the scanner from reporting a multi-feed when a true multi-feed has not actually occurred.

Zone processing — to confirm that the scanner has stopped due to an error condition related to zone processing, you can check the “Operator Log” of the scanner. The error message in the Operator Log will say “Image outside document area”. To access the Operator Log, click on the **Log..** button in the **Scanner>Setup** dialog box.

Auto color detection



Auto Color Detection automatically triggers the scanner to produce either a bi-tonal or color/grayscale image based on the values set for Color Content, Color Amount, and Color Threshold. This is done on a page-by-page basis (for each side) by scanning each page and determining the color content.

In Capture Software, Auto Color Detection is enabled in the Filters tab of Image Setup. Specifically, it is only available in the Color and Grayscale image setup.

Color Content — the following selections are available: **None, Low, Medium, High, Custom.**

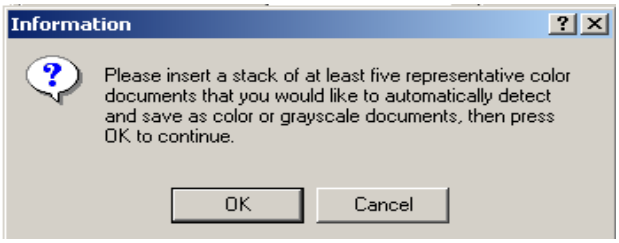
- **None**: disables Auto Color Detection.
- **Low**: documents require only a small amount of color to be saved as color or grayscale images. Use for capturing documents that are primarily black text with small logos, or contain small amounts of highlighted text or small colorful photos.
- **Medium**: documents require more color, as compared with the Low option, before they are saved as color/grayscale images.
- **High**: documents require more color, as compared with the Medium option, before they will be saved as color or grayscale images. Use for distinguishing documents containing medium- to large-size colorful photos from plain black text. Photos with neutral colors may require adjustments to the Color Threshold or Color Amount values in order to be captured directly.

NOTE: When setting Auto Color Detection values, it is suggested that you start with the **Medium** option and scan a typical job set. If too many documents were returned as color/grayscale vs. bi-tonal, then change to the **High** option and re-run the job. If too few documents were returned as color/grayscale vs. bi-tonal, then change to the **Low** option and re-run the job. If none of these options provide the desired results, use the **Learn** option or **Custom** to manually adjust Color Amount and/or Color Threshold.

- **Custom**: allows you to specify **Color Amount** and/or **Color Threshold.**
  - **Color Amount:** the amount of color that needs to be present in a document before it will be saved as either color or grayscale. As the value of Color Amount increases, more color pixels are required. Valid values are 1 to 200.

- **Color Threshold**: the color threshold or intensity (i.e., pale blue vs. dark blue) at which a given color will be included in the color amount calculation. A higher value indicates that a more intense color is required. Value values are 0 to 100.
- **Learn**: use this option if Low, Medium and High options do not give you the desired results. To use the Learn option:

  1. Select **Medium** from the Color Content drop-down box. This will set Color Threshold to the default value.
  2. Click **Learn**. The information dialog box will be displayed:


Information
Please insert a stack of at least five representative color documents that you would like to automatically detect and save as color or grayscale documents, then press OK to continue.
OK
Cancel

  3. Place at least 5 representative color documents in the feeder and click **OK**. These documents will be analyzed and the recommended color amount and color threshold will be calculated for you.

     The suggested Color Amount and Color Threshold values will automatically be updated in the Filters tab.

     NOTE: These settings were calculated based on the representative color documents scanned. If these values do not provide the desired results with your production job set, you may need to manually adjust the Color Threshold and re-run Learn mode.

IMPORTANT:

- Auto Color Detection will only be activated when the Page Setup is configured for Color-only or Grayscale-only scanning. If the Page Setup is configured for dual stream, then the Auto Color Detection settings are ignored.
- The grayed out bi-tonal setting on the Page Setup dialog box are used to generate bi-tonal images for pages that do not meet or exceed the Color Content settings. Therefore, you must temporarily enable bi-tonal scanning, adjust the bi-tonal settings to the desired values, and then disable bi-tonal scanning before saving your Page Setup that will activate Auto Color Detection.
- The Auto Color Detection setting can be different for the front and rear images. To do this you must create two different Image Setups and select the appropriate Image Setup for each side. You can also only enable Auto Color Detection for only one side (e.g. front).
- When enabling Auto Color Detection for grayscale scanning, the scanner still determines the color control for each scanned page (i.e., it does not determine the gray content). If the color content meets or exceeds the specified settings, then the scanner will produce and deliver a grayscale image to Capture Software.

Appendix E *Kodak* i800 Series Scanners: Specific Information

This chapter provides scanner-specific information for following scanners.

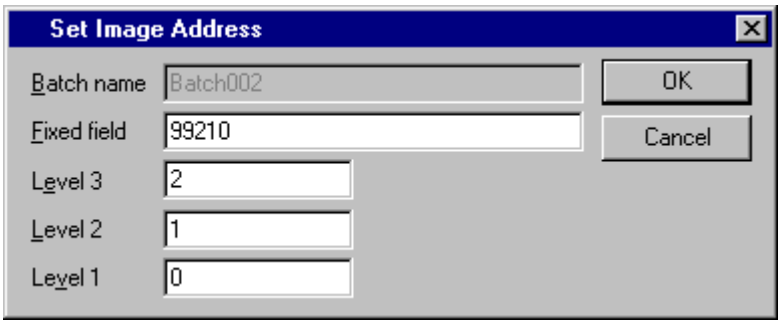
- *Kodak* i810 Scanner
- *Kodak* i820 Scanner
- *Kodak* i830 Scanner
- *Kodak* i840 Scanner

For basic Capture Software information, refer to the previous chapters.

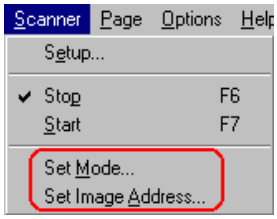
Set counter and image address

Depending on your User Profile settings and the Application Setup, when creating a new batch the starting counter number that is displayed in the Set Counter dialog box is downloaded and assigned (and optionally printed) to the first scanned page. By default, Capture Software suggests a starting counter based upon the Application Setup.

After you click **OK** on the Set Counter dialog box, the Set Image Address dialog box appears.

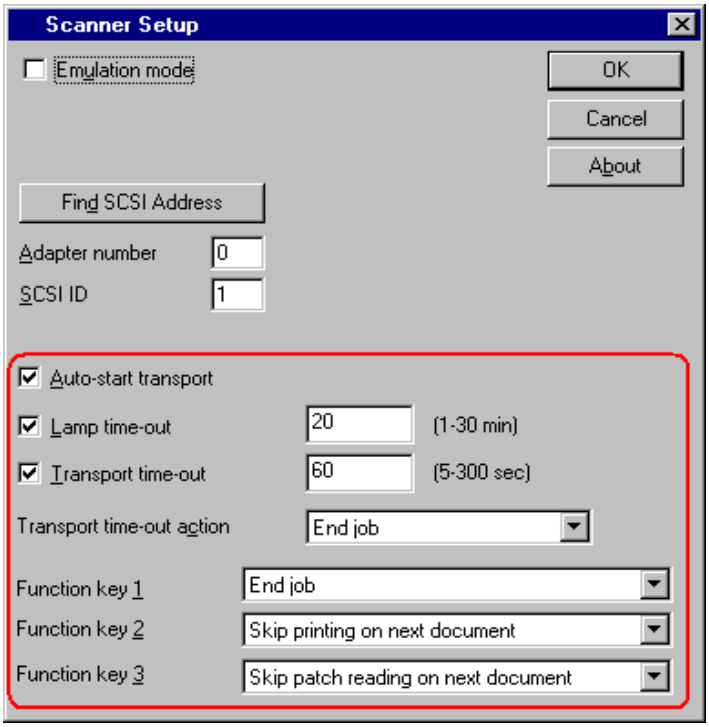


- Enter the starting image address for the batch. It will be downloaded to the attached i800 Series Scanner and will appear in the scanner's LCD display. Only those image address fields (i.e., Fixed field, Level 3, Level 2, and Level 1) that are configured in Application Setup can be modified. By default, Capture Software suggests a starting image address based upon the Application Setup.
- You can also set the image address by selecting **Set Image Address** from the Scanner menu.



Setting up the scanner

You can set up or change the parameters of the scanner by accessing the Scanner Setup (**Scanner>Setup**) dialog box.



Emulation mode — enables/disables running Capture Software in emulation mode without an attached scanner. Refer to the Installation Guide for Capture Software for more information.

NOTE: If the SCSI Address or Emulation mode settings are changed, you may need to exit and restart Capture Software in order to scan successfully.

Find SCSI Address — upon startup, Capture Software automatically locates the scanner and fills in the adapter number and SCSI ID of the scanner. If the scanner was not ready or powered up when Capture Software was started, select **Find SCSI Address** to locate the scanner and fill in the fields if the scanner is available. To key in the adapter number or SCSI ID manually, the following applies:

- If the scanning PC contains more than one SCSI adapter, enter the appropriate adapter number in the Adapter number field, otherwise, leave the adapter number to its default value of 0.
- Enter the SCSI ID number of the attached scanner, usually a number from 1 to 7. The SCSI ID number is visible in the small box on the back panel of the scanner.

Auto-start transport — starts the scanner transport and feeder automatically when the Start Scanner button is pressed in the main window of Capture Software. By default, this setting is enabled. When disabled, the scanner transport will not automatically start. As a result, you must press the green button on the scanner operator control panel to initiate scanner feeding.

Lamp time-out — when enabled, the lamps in the scanner will automatically shut off after a specified number of minutes of scanner inactivity. Valid values are 1 to 30 minutes. When this feature is disabled, the lamps in the scanner remain on until the scanner is powered off.

Transport time-out — when enabled, the scanner transport and feeder will automatically stop after a specified number of seconds of no scanning. Valid values are 5 to 300 seconds. When this feature is disabled, the scanner transport and feeder remain on until the scanner is disabled in Capture Software.

Transport time-out action — select an option to determine what takes place when the transport times out.

- Select **End job** to stop the transport and feeder and disable the scanner. Scanning must be reinitiated from Capture Software.
- Select **Stop feeder and transport** to stop the transport and feeder, and leave the scanner enabled. Scanning can be reinitiated by pressing the green button on the scanner operator control panel.

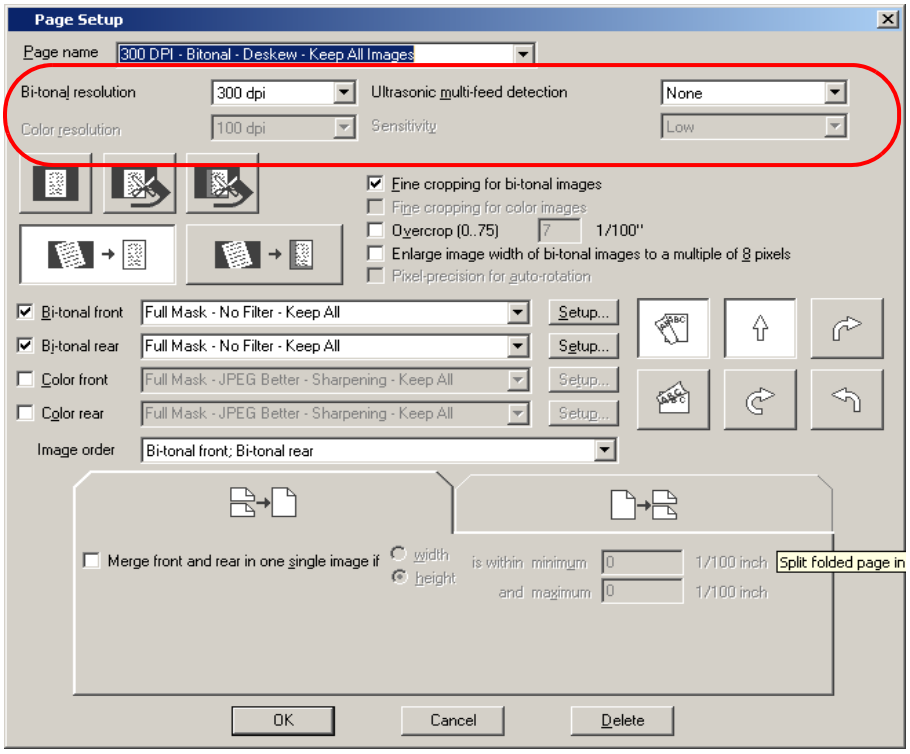
Function keys 1-3 — the i800 Series Scanners have three programmable keys that are accessible from the operator control panel. These keys are available for use by the operator when the scanner is enabled. The operator control panel displays the numbers 1 through 3 corresponding to the buttons on the control panel that represent the function keys.

Each of the programmable keys can be assigned to the following functions:

- Select **None** for no scanner functionality. This is the default setting.
- Select **End Job** to stop the feeder and transport and disable the scanner. Scanning is stopped in Capture Software.
- Select **Terminate Batch** to terminate the active batch when scanner batching is enabled. See the i800 Series Scanner options in Chapter 4, *Application Setup*.
- Select **Skip multi-feed detection on next document** to turn off multifeed detection for the next page scanned.
- Select **Skip printing on next document** to turn off printing for the next page scanned.
- Select **Skip patch reading on next document** to turn off patch code reading for the next page scanned.

Page Setup Properties

Following is a description of the options whose settings are unique to the i800 Scanners. Most of the options on this dialog box are described in Chapter 9, *Setting up Page Properties*.



Resolution — the table below provides the valid resolution values for bi-tonal and color scanning, as well as the valid combination of resolutions when dual-stream scanning.

Bi-tonal Resolution (dpi)	Color Resolution (dpi)
200	200, 150, 100
300, 240	300, 200, 150, 100
400	300, 200

NOTES:

- For the i810 Scanner and i830 Scanner, which are bi-tonal only scanners, the color image resolution setting is not available.
- For the i820 Scanner, the color resolution value of 300 dpi is not available.
- When color-only scanning with an i820 Scanner or i840 Scanner, the bi-tonal resolution setting is not available (i.e., is grayed out) in the Page Setup dialog box.

Ultrasonic Multi-feed detection — choose from either **None, Warn, Warn and Stop** or **End job**.

When **Warn** is enabled, the scanner warns you with an audible alarm whenever a multi-feed is detected (commonly caused by 2 or more pages stuck together as they pass through the feeder). A message is also displayed on the scanner operator console. The scanner remains enabled and continues to scan.

When **Warn and Stop** is selected, the scanner feeder and transport stop immediately when a multi-feed is detected. The scanner remains enabled and scanning can be continued by pressing the green button on the scanner operator console.

When **End job** is selected, the scanner feeder and transport stop immediately when a multi-feed is detected. The scanner is also disabled. Scanning can be continued only by clicking on the green Start button in Capture Software.

Zone Processing — when configuring a zone for zone processing, defining a bi-tonal zone using the Draw mask tool (see Chapter 9, *Setting Up Page Properties*) will not produce an accurate result. When scanning a single page from which to define the zone, Capture Software configures the scanner for regular auto-crop and deskew, with Border Framing. Border Framing results in a uniform black border around all four edges of an auto-cropped and deskewed image (bi-tonal only). While Border Framing is not applied to zone-processed images during production scanning, it is applied by default when using the Draw Mask function. Therefore, drawing a zone for zone processing on a Border Framed image will not produce an accurate zone definition. As a result, you will need to make minor adjustments to the Left and Top mask settings after drawing a mask for a bi-tonal zone definition.

Image Setup Properties

Bi-tonal Filters tab

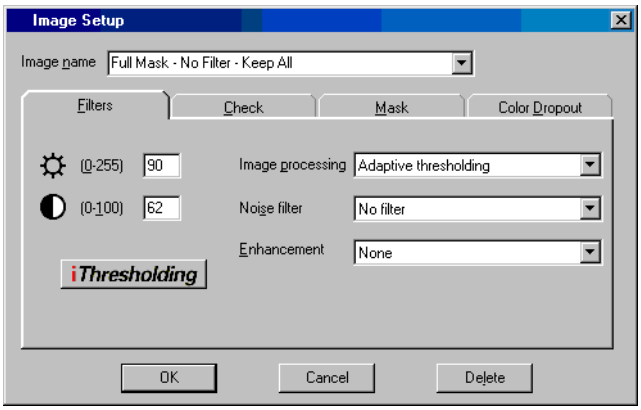


Image Processing — select from the following options:

- **Adaptive thresholding** — also known as ATP. The Adaptive Threshold Processor separates the foreground information in an image (i.e., text, graphics, lines, etc.) from the background information (i.e., white or non-white paper background).

  Adaptive Thresholding works on grayscale scanned images and outputs a bi-tonal electronic image. Its strength lies in its ability to separate the foreground information from the background information even when the background color or shading varies and the foreground information varies in color quality and darkness. Different types of documents may be scanned using the same image processing parameters and results in excellent scanned images. If mixing documents of different colors, paper qualities and textures, and print quality, the Adaptive Thresholding features optimize each image automatically.

  When Adaptive Thresholding is selected, all of the other settings in the Filters tab are available for selection. A Contrast value of 100 is considered fully adaptive thresholding.

- **Fixed Processing** — used for black-and-white and other high-contrast documents. A single level is set to determine the black-and-white transition. The threshold is programmable over the entire density range. Fixed thresholding sets contrast to 0 when scanning is initiated. If Fixed Processing is selected, Contrast is not available.
- **Error Diffusion** — screens photographic areas of a document to simulate gray levels yet sharpens the edges of text. It is recommend that error diffusion is used when a mix of text, graphs, pictures, and colors in the documents are being scanned.
- **Dithering** — dithering is a way to simulate gray shades and should be used for scanning photos. It is not recommended for text-only images. Three options are available:
  - 64-Level Bayer Dither
  - 64-Level 45 Degree Clustered Dot Screen
  - 64-Level Dispersed Dot Screen

  NOTES:

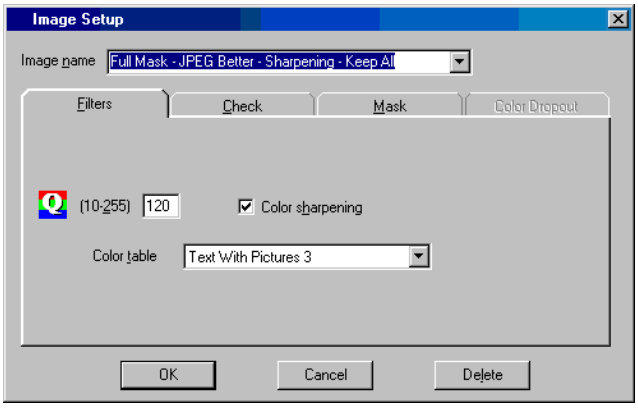
  - When Error Diffusion or Dithering is selected, all of the other settings in the Filters tab are not available, as they are not applicable to error diffused or dithered images.
  - In Capture Software, because bi-tonal images are always scanned with Group 4 compression, Error Diffusion and Dithering will likely cause negative image compression (less than one-to-one). This will result in very large image sizes for bi-tonal images.
  - If Error Diffusion or Dithering is only set on one side (Front or Rear) and is combined with a different setting for the other side, a scanner error ("Refeed Document Set") may occur. Error Diffusion and Dithering work best when set for both the Front and Rear bi-tonal images setups.
  - When Error Diffusion or Dithering is selected, use caution when selecting **Fine cropping for bi-tonal images**. The fine cropping feature may not work well with error diffused or dithered images, especially from dark background documents.
- **Noise filter** — these options are available to help increase the compression ratio and improve the appearance of document images.
  - **Majority Rule** — determines central pixel data according to the number of white and black pixels.
  - **No Filter** — no enhancement is done to the images.
  - **Remove Lone Pixels** — reduces random noise on bi-tonal images by converting a black pixel surrounded by white pixels to white and by converting a white pixel surrounded by black pixels to black.

  NOTES:
  - Using the noise filter on documents containing very fine detail (e.g., the dot on an "i" in 4-point type) may cause information to be lost. It is recommended that the noise filter not be used when scanning documents with text smaller than 7-point type.
  - Using the noise filter in conjunction with thresholding will optimize the appearance of document images.
  - Do not use the noise filter with screening (dithering).

- **Enhancement** — select **None** or **Halftone removal**. Halftone removal is used to enhance images. containing dot matrix text and/or images with shaded or color backgrounds using halftone screens. This filter effectively eliminates noise caused by the halftone screens.

Color Filters tab

For the i820 Scanner and i840 Scanner, you can specify a different Filters option.



JPEG Quality — JPEG quality controls the amount of file compression performed by the scanner when producing JPEG images. Enter a value between 10 and 255. A higher setting increases image compression (resulting in smaller file sizes), but decreases image quality. A lower setting decreases image compression (resulting in larger file sizes), but improves image quality. The following settings can be used as guidelines.

Image Quality	Setting
Draft	255
Good	200
Better	120
Best	56
Superior	10

Color sharpening — enable this check box to configure the scanner to perform color sharpening as part of the scanning process. Color sharpening improves the readability of small text (8-point type or smaller) on color documents. By default, scanner color sharpening is enabled.

Color table — the selected color table affects how the scanner reproduces the color of a scanned document. Select a color table from the drop-down list. Use the **Pictures** tables when scanning photos or pictures. Use the **Text** table when scanning text documents with color content. The **Text with Pictures** tables are recommended for documents that contain both text and pictures.

Appendix F *Kodak* 3500/4500 Series Scanners: Specific Information

This appendix provides information that is pertinent to *Kodak* 3500/4500 Series Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual. The *Kodak* 3500/4500 Series Scanners include:

Kodak Digital Science Scanner 3520

Kodak Digital Science Scanner 3590C

Kodak Digital Science Scanner 4500

Creating a new batch with Document Printing enabled

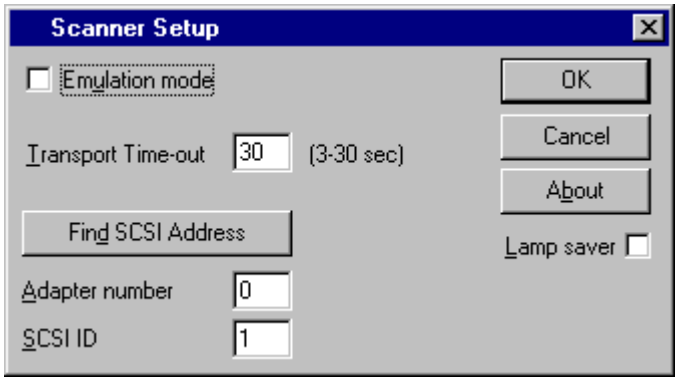
Document Printing is only available with the Scanner 3520DP and Color Scanner 4500DP. When you create a new batch and document printing is enabled, you must enter a starting counter number.

The starting counter number will be downloaded and printed on the first scanned page.

Setting up the scanner

You can set up or change the parameters of the scanner you will be using by accessing the Setup dialog box from the **Scanner** menu.

Following are descriptions for the options on the Scanner Setup dialog box.



Emulation mode — enable this checkbox to run Capture Software in emulation mode without a scanner attached. For more information about emulation mode, see the *Installation Guide for Capture Software.*

NOTE: If the Emulation mode setting is changed, you need to exit and restart Capture Software in order to scan successfully.

Transport timeout — when enabled, the scanner transport and feeder will automatically stop after a specified number of seconds of no scanning. Valid values are 3 to 30 seconds. When a time-out occurs, the scanner transport stops and is disabled.

Find SCSI Address — upon startup, Capture Software automatically locates the scanner and fills in the adapter number and SCSI ID of the scanner. If the scanner was not ready or powered up when Capture Software was started, select **Find SCSI Address** to locate the scanner and fill in the fields if the scanner is available. To key in the adapter number or SCSI ID manually, the following applies:

- If the scanning PC contains more than one SCSI adapter, enter the appropriate adapter number in the Adapter number field, otherwise, leave the adapter number to its default value of 0.
- Enter the SCSI ID number of the attached scanner, usually a number from 1 to 7. The SCSI ID number is visible in the small box on the back panel of the scanner.

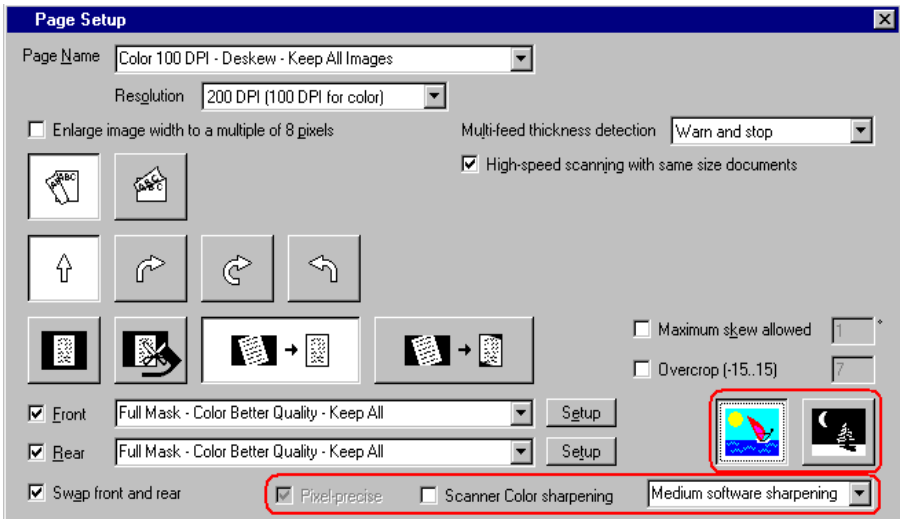
Lamp saver — enable this option to have the lamps in the scanner automatically shut off after 10 minutes of scanner inactivity. When this option is disabled, the lamps in the scanner remain on until the scanner is powered off.

Page Setup Properties

Following is a description of the options that are exclusive to the 3500/4500 Series Scanners. Most of the options on this dialog box are described in Chapter 9, *Setting up Page Properties*.

Swap Front and Rear — this option is useful when pages are scanned with the rear side up on purpose (e.g., rear side is carbon-backed, which would contaminate the feeder rollers if scanned front side up).

NOTE: When you scan in simplex mode, the Swap Front and Rear option will cause an error during scanning. Disable this option when you scan in simplex mode. You should also disable this option when binarizing color images, as it could cause unpredictable results.



Multi-feed thickness detection — select **None**, **Warn**, or **Warn and Stop** from the drop-down list. When enabled, the scanner warns you with an audible alarm whenever a scanned sheet of paper is detected to be thicker (commonly caused by a multi-feed) than a single sheet. The detection is based on the thickness of a scanned sheet of paper used in the Multi-feed Thickness Calibration (accessed from the Scanner menu).

When **Warn and Stop** is selected, the scanner stops immediately when a multi-feed is detected. You must open the scanner and remove the multi-feed sheets before you can resume scanning.

High-speed scanning with same size documents — select this check box if you are scanning batches that contain sheets that are all the same size. This enables the scanner to scan at a faster rate of pages per minute. Specifically, for example, scanner throughput increases from 75 pages per minute to 85 pages per minute for letter-size documents that are scanned in landscape mode at 200 dpi (100 dpi for color).

For color scanners 3590C and 4500

Pixel precise — when the page setup is configured to do auto-rotation and/or auto-cropping of color images *without deskew*, then this check box becomes available. When enabled, Capture Software will perform pixel-precise auto-rotation and/or auto-cropping. Enabling pixel-precise should result in the complete removal of any black borders around the color image that may remain if pixel precise were disabled.

NOTES:

- Auto-cropping and auto-rotation are more accurate with **Pixel-precise** enabled, but they are slower than when pixel-precise is disabled.
- When one of the deskew options is enabled, **Pixel-precise** is automatically enabled, as color deskew processing always includes pixel-precise auto-cropping.
- Deskewing color images is reliable up to a skew angle of 10 degrees.

Scanner Color sharpening — configures the scanner to perform color sharpening as part of the scanning process. Color sharpening improves the readability of small text (8-point type or smaller) on color documents. By default, scanner color sharpening is enabled when color deskew processing is disabled.

However, when color deskew processing is enabled, **Scanner Color sharpening** is automatically disabled. With color deskew processing, color sharpening needs to be performed by the software after deskew. As a result, Scanner Color sharpening should be disabled and software sharpening should be enabled.

Software sharpening — select **No** software sharpening, **Low**, **Medium**, or **High** on the drop-down list. When enabled, color sharpening is performed by the software after all other color image processing. When color deskew processing is enabled, software sharpening is automatically enabled (and is highly recommended). Medium is the default setting. When color deskew processing is disabled, software sharpening is automatically disabled. The higher the software sharpening setting, the better small characters will be able to be read after color deskew processing. However, a higher setting will result in larger color images sizes and slower color image and deskew processing.

Color Scanner 3590C only

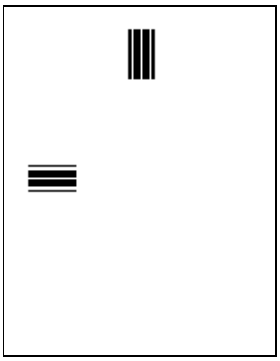
The following properties are available only with the Color Scanner 3590C.

Start scanning in color — when performing color scanning (front color, rear black and white), select this icon to start the Color Scanner 3590C in color mode.

Start scanning in black and white — when performing black-and-white scanning (both front and rear black-and-white), select this icon to start the Color Scanner 3590C in black-and-white mode.

Color patch detection

When you scan with the Color Scanner 3590C, Capture Software enables detection of the Kodak color patch document.



This patch document, when detected by the scanner, automatically switches the scanner from color to black-and-white mode or black-and-white to color mode.

This option is useful when scanning a mixture of color and black-and-white documents. Another use for this feature is when you are scanning bar code header sheets (which can be read only in black-and-white mode) followed by color documents.

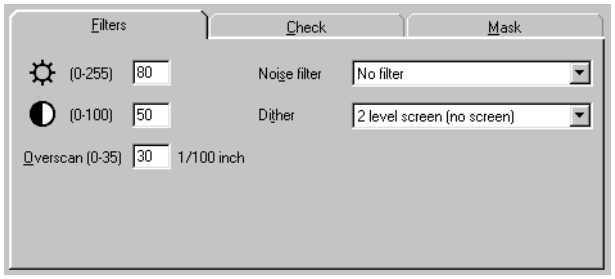
It is important to note that whenever the Color Scanner 3590C is stopped and restarted in Capture Software, the scanner will always be restarted in the mode defined in the selected Page Setup.

IMPORTANT: Therefore, if the scanner starts in color mode, is switched to black-and-white mode via a patch, then is stopped (because of a time-out condition, paper jam, user intervention, etc.), the scanner will be restarted in color mode.

Image Setup Properties

Filters tab

The Filters tab is slightly different for each 3500/4500 Series Scanner.



Threshold — threshold controls the lightness and darkness of the background in an image. As the threshold value increases, more of the darker grays in the image turn black. As the threshold value decreases, fewer darker grays turn black. Enter a value between 0 and 255.

Contrast — contrast enhances the edges contained in a document. Increasing the contrast level sharpens the image edges. Decreasing the contrast level softens the image. Enter a value between 0 and 100. Setting the Contrast to “0” enables Fixed Thresholding and disables Adaptive Threshold Processing (ATP).

Overscan — controls the gap between images. Enter a value between 0 and 35 (1/100 inch). A wider gap makes deskew more reliable and prevents any loss of corners. The default is “30” for bi-tonal scanning and “35” for color scanning.

NOTE: When drawing a mask in the Mask tab to define the Scan area, it is highly recommended that you set Overscan to “0.”

Noise filter — these options are available to help increase the compression ratio and improve the appearance of document images.

- **Majority Rule:** determines central pixel data according to the number of white and black pixels.
- **No Filter:** no enhancement is done to the images.
- **Remove Lone Pixels:** reduces random noise on bi-tonal images by converting a black pixel surrounded by white pixels to white and by converting a white pixel surrounded by black pixels to black.

NOTES:

- Using the noise filter on documents containing very fine detail (e.g., the dot on an “i” in 4-point type) may cause information to be lost. It is recommended that the noise filter not be used when scanning documents with text smaller than 7-point type.
- Using the noise filter in conjunction with thresholding will optimize the appearance of document images.
- Do not use the noise filter with screening (dithering).

Dither Pattern — dithering is a way to simulate gray shades and should be used for scanning photos. It is not recommended for text-only images. Four options are available:

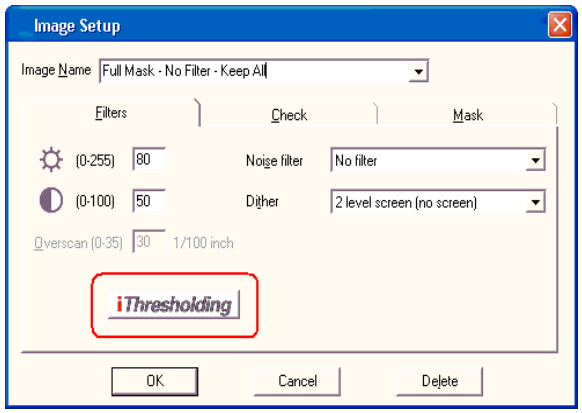
- 2-level screen (no screen)

  Always use 2-level screen with business documents. The other dithering options significantly increase the file sizes of the electronic images. Also, for OCR reading it is critical that you use 2-level dithering. The other dithering options decrease the read rate of any OCR system.

- 64-level 45° Clustered Dot Screen
- 64-level Bayer Dither
- 64-level Dispersed Dot Screen

iThresholding setting for Scanner 3520

If your Scanner 3520 is installed with an iThresholding board, the Filters tab will contain the iThresholding button. Clicking on the iThresholding button sets the Threshold value to 255, thus enabling the iThresholding feature.

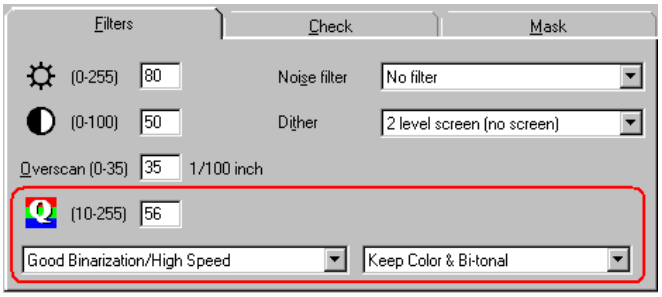


When iThresholding is enabled, the Scanner 3520 automatically determines the optimal Threshold setting for each scanned page, thereby improving overall scanning productivity and image quality. With the iThresholding feature, the need to make adjustments to the Threshold setting when scanning mixed documents of different colored or shaded backgrounds is greatly reduced.

To disable the iThresholding feature, click on the iThresholding button again. This will allow you to modify the Threshold field.

Additional settings for the Color Scanner 3590C and Color Scanner 4500

When color scanning with the Color Scanner 3590C or Color Scanner 4500, the settings for **Noise filter** and **Dither** are not used. In addition, **Threshold** and **Contrast** are not used unless you are binarizing color images.



JPEG Quality — JPEG quality controls the amount of file compression performed by the scanner when producing JPEG images. Enter a value between 10 and 255. A higher setting increases image compression (resulting in smaller file sizes), but decreases image quality. A lower setting decreases image compression (resulting in larger file sizes), but improves image quality. The following settings can be used as guidelines.

Image Quality	Setting
Good	200
Better	120
Best	56

Binarization of color images — MultiStream™ processing (where a black-and-white image is produced for each color image) can be achieved by enabling one of the Binarization options. When enabled, binarization is done on-the-fly during scanning. Select one of the following from the drop-down list:

- **No Binarization** — disables binarization of color images in the image setup.
- **Best Binarization/Low Speed** — enables binarization of color images in the image setup. Binarization is done in software on the host PC and produces the best binarization results at low speed (i.e., at approximately half of the rated speed on the Color Scanner 4500 running in duplex mode).
- **Good Binarization/High Speed** — enables binarization of color images in the image setup. Binarization is done in software on the host PC and produces good binarization results at high speed (i.e., at approximately the rated speed of the Color Scanner 4500 running in duplex mode; assumes at least a 750 MHz processor on the host PC).
- **Hardware – Best Binarization/High Speed** — enables binarization of color images in the image setup. Binarization is done in hardware and produces the best binarization results at high speed. A THR2 board (from Picture Elements) is required to be installed on the host PC. For more information on THR2 and how to acquire a THR2 board, refer to the Picture Elements web site at www.picturel.com.

NOTES:

- When a THR2 board is installed on the host PC, only the Hardware – Best Binarization/High Speed option is available for selection.
- Binarization is supported only when the scanning resolution is 150 dpi. The binarization options are not available when the resolution is set to 100 dpi.
- Adjusting the Threshold and Contrast settings in the Filters tab will affect binarized images in the same way as black-and-white scanned images.
- Binarized images are upscaled from 150 dpi color images to 200 dpi and are stored as Group 4 TIFF files in Capture Software.
- Binarization takes place after color deskew and auto-crop (when enabled). Therefore, Capture Software does not perform deskew/auto-crop processing on binarized images.

Binarized image retention and display — when binarization is enabled, the following drop-down list of image retention options is available for selection:

- **Keep Color & Bi-tonal** — displays and saves to disk both the color "parent" image and the binarized image. This is the default selection.
- **Keep Color only** — displays and saves to disk only the color image. The binarized image is discarded. Use this option when binarization is used only for the purposes of reading bar codes or patch codes on color images.
- **Keep Bi-tonal only** — displays and saves to disk only the binarized image. The color image is discarded.

Binarized images are displayed on-the-fly during scanning with their "parent" color images. In general, binarized images are displayed before the color images. Capture Software will always try to preserve a Front/Rear image relationship when binarization is enabled. As a result, you can expect the following image order for these scenarios:

Scenario	Result
Color Scanner 4500 Duplex binarize both front and rear	Front bi-tonal; Rear bi-tonal; Front color; Rear color
Color Scanner 3590C binarize front	Front bi-tonal; Rear bi-tonal; Front color
Color Scanner 4500 Duplex binarize only the front	Front bi-tonal; Rear color; Front color
Color Scanner 4500 Duplex binarize only the rear	Front color; Rear bi-tonal; Rear color

NOTE: When auto-deletion of images is enabled in the image setup along with Binarization, the *binarized image size is compared against the byte threshold*. Both the binarized and the color "parent" images will be deleted when the binarized image size falls below the byte threshold.

Installation requirements for binarization

To activate the ability to binarize color images, you must install the binarization support libraries from the CD supplied with your color scanner. *These libraries are not installed with Capture Software*.

The binarization support libraries are installed when installing the Host Diagnostics application for your Color Scanner 3590C or Color Scanner 4500. Version 2.2.25, or later, of Host Diagnostics is required. To install Host Diagnostics, you must run the **SETUP.EXE** program located in the **DIAGS** directory on the Scanner CD.

If you have a THR2 board to perform binarization, the Host Diagnostics application must be installed before executing the installation program provided with the THR2 board.

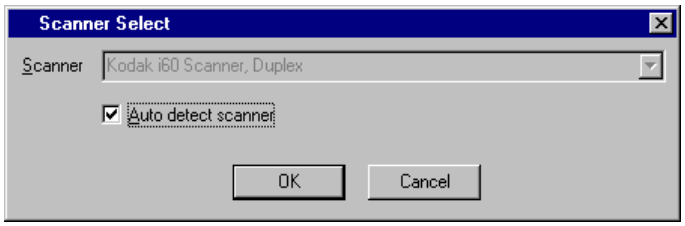
Appendix G *Kodak* i1200/i1300 Series Scanners: Specific Information

This appendix provides information that is pertinent to the *Kodak* i1200 and i1300 Series Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual.

Selecting the scanner

Select the scanner you want to use by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box appears.



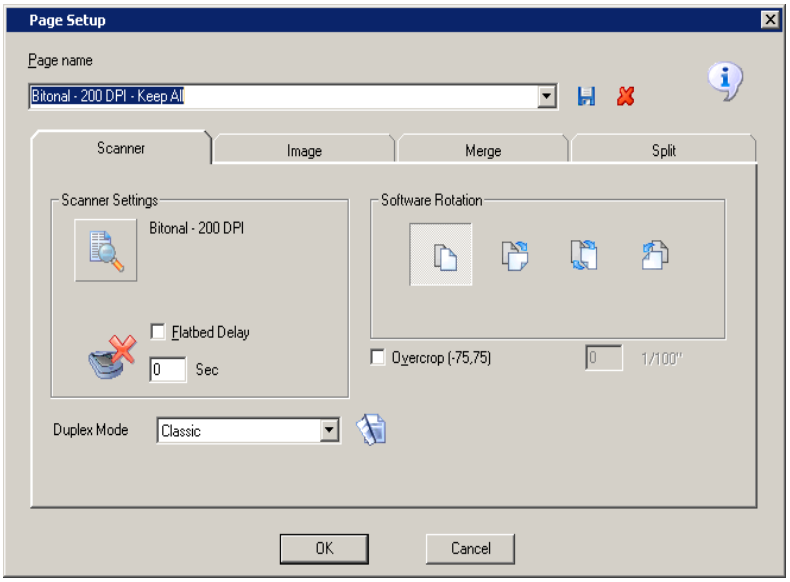
   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the **Scanner** drop-down list.

   When running in emulation mode, changing the scanner model changes the scanner you are emulating.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

Page Setup Properties

The following is the Page Setup dialog box for the i1200 and i1300 Series Scanners.



To adjust scanning parameters, such as Resolution, Image Type (bi-tonal, color, grayscale), etc., click on the **Scanner Settings** button. This accesses the TWAIN Driver user interface where scanning adjustments are made.

Refer to the PDF document entitled, “TWAIN Driver settings for i1200 and i1300 Scanners” for a complete description on how to use the TWAIN Driver. This document can be found in the Docs directory on the Capture Software CD or at the following URL:

www.kodak.com/US/en/dpq/site/TKX/name/captureSoftwareUserGuide.

Appendix H *Kodak* i1800 Series Scanners: Specific Information

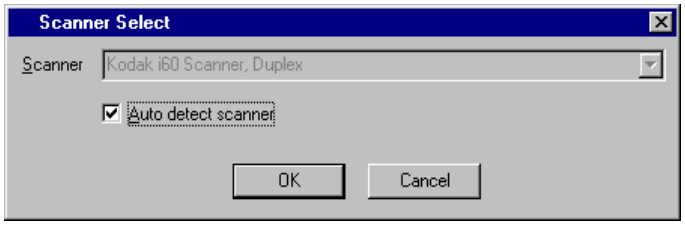
This chapter provides scanner-specific information for the *Kodak* i1800 Series Scanners.

For basic Capture Software information, refer to the previous chapters.

Selecting the scanner

Select the scanner you want to use by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box appears.



   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the **Scanner** drop-down list.

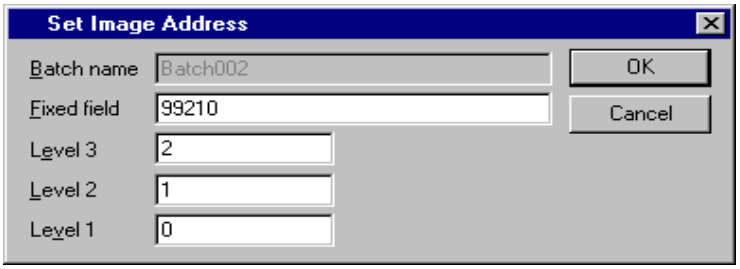
   When running in emulation mode, changing the scanner model changes the scanner you are emulating.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

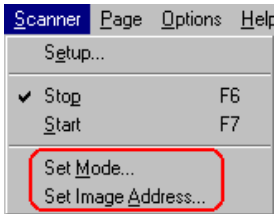
Set counter and image address

Depending on your User Profile settings and the Application Setup, when creating a new batch the starting counter number that is displayed in the Set Counter dialog box is downloaded and assigned (and optionally printed) to the first scanned page. By default, Capture Software suggests a starting counter based upon the Application Setup.

After you click **OK** on the Set Counter dialog box, the Set Image Address dialog box appears.



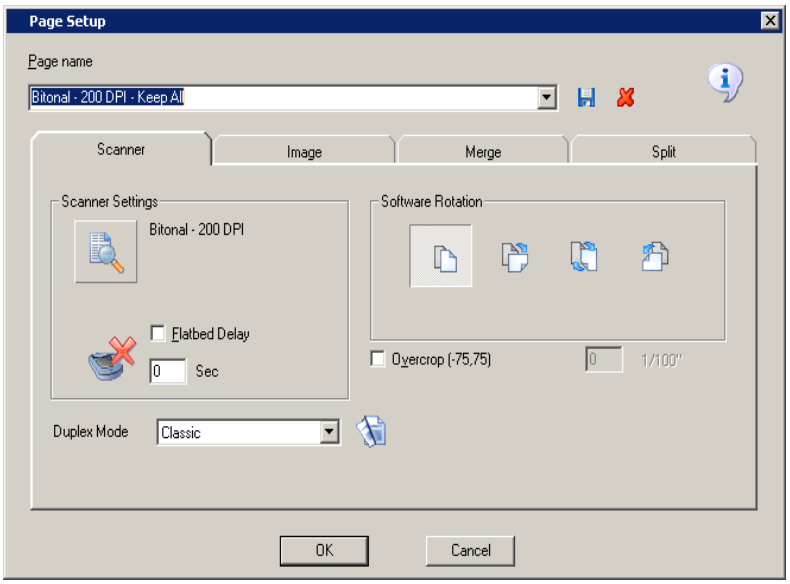
- Enter the starting image address for the batch. It will be downloaded to the attached i1860 Scanner and will appear on the touchscreen on the scanner. Only those image address fields (i.e., Fixed field, Level 3, Level 2, and Level 1) that are configured in Application Setup can be modified. By default, Capture Software suggests a starting image address based upon the Application Setup.
- You can also set the image address by selecting **Set Image Address** from the Scanner menu.



NOTE: Image Addressing is only supported in the i1860 Scanner.

Page Setup Properties

The following is the Page Setup dialog box for the i1800 Series Scanners.



To adjust scanning parameters, such as Resolution, Image Type (bi-tonal, color, grayscale), etc., click on the **Scanner Settings** button. This accesses the TWAIN Driver user interface where scanning adjustments are made.

Refer to the PDF document entitled, “TWAIN Driver settings for i1800 Scanners” for a complete description on how to use the TWAIN Driver. This document can be found in the Docs directory on the Capture Software CD or at the following URL:

www.kodak.com/US/en/dpg/site/TKX/name/captureSoftwareUserGuide.

Appendix I *Kodak* i1400 Series Scanners: Specific Information

This appendix provides information that is pertinent to the *Kodak* i1400 Series Scanners and is not documented in the earlier chapters of this manual. Only the exceptions are documented in this appendix; all basic functionality can be found in the main chapters of this manual.

Creating a new batch with Document Printing enabled

If Document Printing is enabled in Application Setup, the Set Counter dialog box is displayed:

- Enter a starting counter number. The number will be downloaded and enabled on the first scanned page.

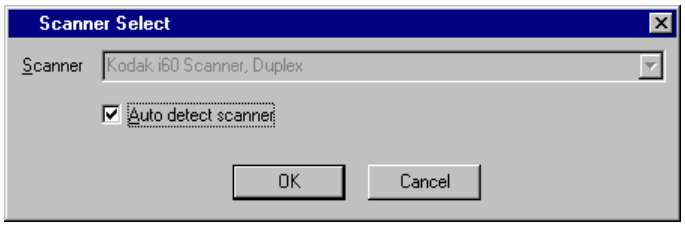
Capture Software keeps track of the counter across scanned batches and will suggest a starting counter equal to the counter of the last scanned page + 1. When Capture Software is restarted, the suggested starting counter is reset to "1".

NOTE: There is an option in the i14XX Options dialog box in Application Setup to set the counter to the same starting value for each new batch.

Selecting the scanner

Select the scanner you want to use by accessing the Scanner Select dialog box.

1. Select **Scanner>Select**. The Scanner Select dialog box appears.



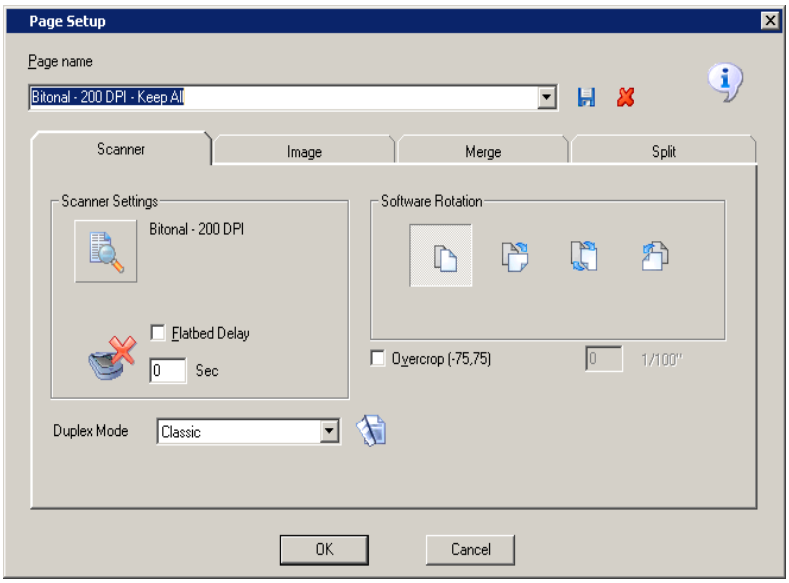
   The **Auto detect scanner** check box is enabled by default. If more than one scanner is installed and connected to the host PC, uncheck the Auto detect scanner check box and select the scanner you want to use from the **Scanner** drop-down list.

   When running in emulation mode, changing the scanner model changes the scanner you are emulating.

2. Click **OK**.
3. Exit and restart Capture Software for any changes to take effect.

Page Setup Properties

The following is the Page Setup dialog box for the i1400 Series Scanners.



To adjust scanning parameters, such as Resolution, Image Type (bi-tonal, color, grayscale), etc., click on the **Scanner Settings** button. This accesses the TWAIN Driver user interface where scanning adjustments are made.

Refer to the PDF document entitled, “TWAIN Driver settings for i1400 Series Scanners” for a complete description on how to use the TWAIN Driver. This document can be found in the Docs directory on the Capture Software CD or at the following URL:

www.kodak.com/US/en/dpq/site/TKX/name/captureSoftwareUserGuide.

Appendix J Glossary

Application — contains all software parameters that allow images to be easily captured, processed and delivered to the desired output destination.

You can create an unlimited number of applications with Capture Software (the actual number of applications allowed depends on directory limits imposed by the operating system). Applications are distinguished by the batch and document separation methods used (e.g., patch codes, document/image counters, etc.), indexing requirements (e.g., bar code) and Batch Output Format requirements. With an application, you can produce batches of an essentially unlimited number of documents (up to 999999999) which are used in conjunction with other digital document management systems and are available in several output formats (e.g., IMR Alchemy, PDF, eiStream WMS RBE).

Attachment — when scanning a multi-page document, an attachment refers to those pages that are in addition to the lead or first page of the document. For instance, when scanning a 3-page document, pages 2 and 3 are considered attachments.

Auto-Crop — automatically removes the border of an image.

Auto Deskew — automatically straightens the image.

Batch — a collection of documents or images that are uniquely indexed. An application can contain several batches (each up to 999999999 documents; essentially unlimited). Processing a batch means converting the batch to a specific output format (e.g., single-page TIFF, PDF, LaserFiche) and sending it to a batch destination folder/subdirectory. Batches can be processed one by one or together.

Batch Output Format — determines the image format (e.g., TIFF, PDF, JPEG) and output destination for a batch that is processed. Included are the name and output directory structure for image files and index files.

Bi-tonal — images comprised mostly of black-and-white; no gray levels.

Document — a **paper** document is a collection of pages; an **electronic** document is a collection of images. A document containing many pages is called a multi-page document (e.g., a file folder or article). A document containing only one page is called a single-page document (e.g., a check). Initially, every document is in paper form and becomes an electronic document after it is scanned; Capture Software gives every document a unique electronic document number. This document number is cross-referenced with index data that can be uploaded to any document management system.

Document index — the document index links search fields (up to 10 search fields) with the document number of each document. The document index can be built manually or automatically with bar codes or default values.

Dual Stream — see *Simultaneous scanning.*

Duplex — pertains to both sides of a scanned page.

Image — the scanner converts sides to images. Every image belongs to a document with a unique document number. Capture Software gives every image a sequential number inside its document. One document can contain up to 999999999 (i.e., essentially unlimited) images. Capture Software distinguishes between an image coming from the front or rear side of a page. This allows Capture Software to perform side-specific processing (e.g., deletion of blank/rear sides) where appropriate.

Capture Software also distinguishes between color, grayscale, and bi-tonal (black and white) images and can perform color/grayscale versus bi-tonal specific processing.

Example: Document 250 contains two double-sided pages and produces an electronic document number 250, which contains four images (1-4).

Page — a page is always in paper form and is part of a paper document. A page can produce one image (single-sided page), two images (double-sided page), or four images (dual-stream; color and bi-tonal) after scanning.

Production Applications — applications which allow you to scan and create batches in a specific application.

Scan Cache — the location where images are stored after being scanned into a batch and before the batch is processed. By default, the Scan Cache is defined to be on the local hard drive (e.g., C:\) of the scanning PC.

Side — one page has two sides, front and rear. With single-sided pages, the rear is blank.

Simplex — pertains to one side of a scanned page.

Simultaneous scanning— also known as *dual stream,* is the scanner's ability to output both color/grayscale and bi-tonal images simultaneously without any further processing required by the host computer.

Template Applications — read-only applications that allow you to create a Production application based on the parameters used in the template. Template applications cannot be opened, they can only be set up. Capture Software provides several pre-defined Template applications.

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DOCUMENT IMAGING

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